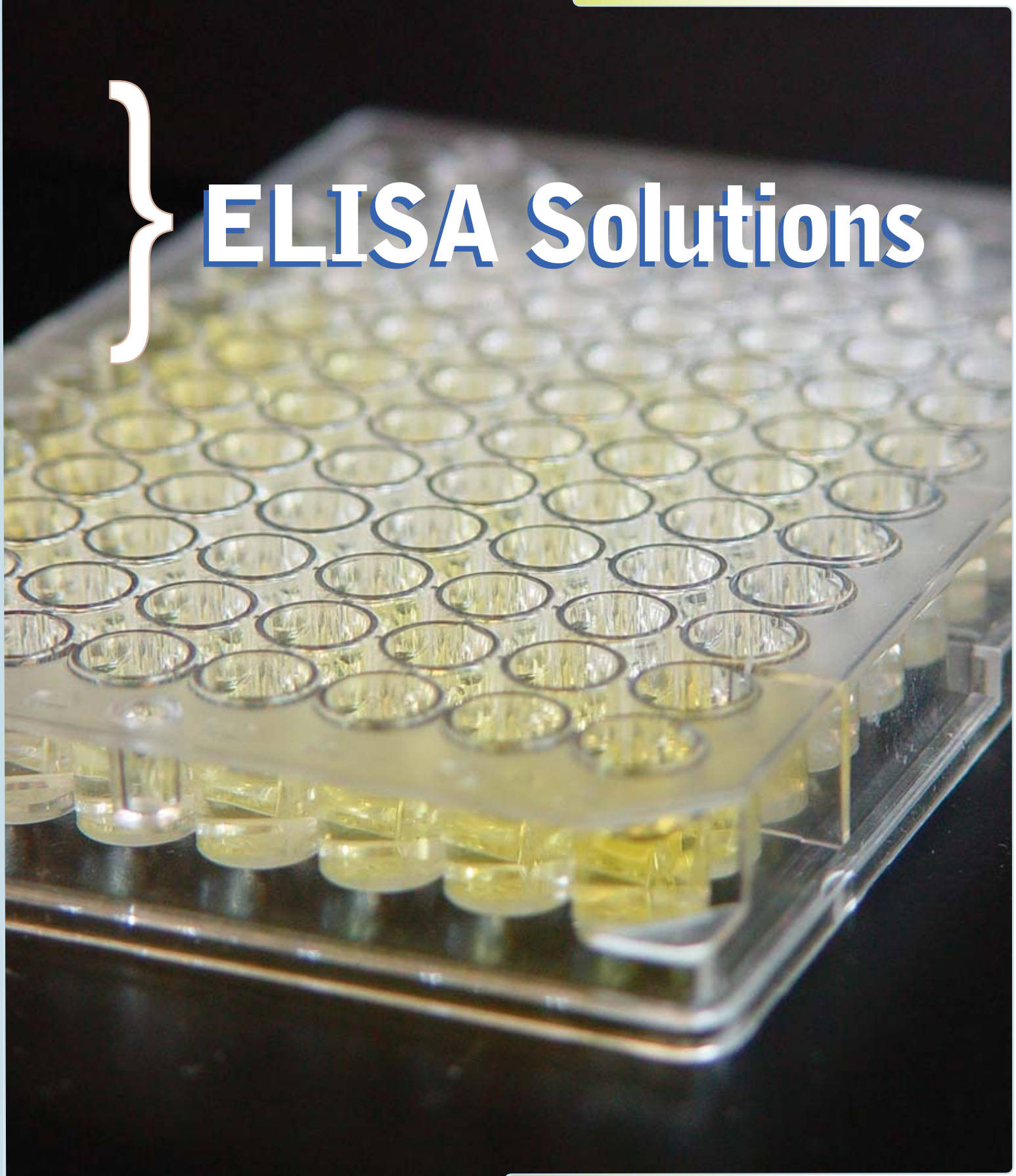
ImmunoChemistry TECHNOLOGIES LLC

ELISA Solutions



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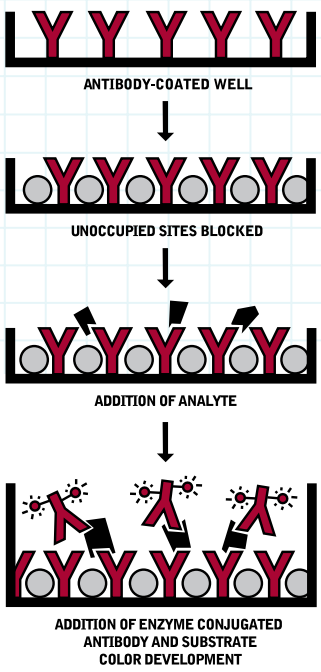
HOW DO I BUILD A BETTER ASSAY?



Using solutions from ImmunoChemistry Technologies (ICT), you have all the components you need to to build a better ELISA. ICT's coating buffers, blockers, sample and assay diluents, conjugate stabilizers, and wash buffer all work together to minimize the build up of unwanted proteins to generate a very clean signal.

On the molecular level, many layers of proteins and potentially interfering substances build-up during an ELISA. The first layer of protein occurs when coating the plate with an antibody or antigen (the capture). Ideally, all binding sites are available, but realistically the proteins adhere to the plate randomly, in layers, and some of the binding sites are hidden. ICT's proprietary coating buffers can help to maximize the adsorption of the protein onto the ELISA plate surface. A blocking buffer is added next to prevent interfering substances from the sample and detection antibody from binding to the open spaces on the plate.

When adding the test sample to an antibody sandwich assay (shown here), the analyte is bound to an antibody coated onto the plate. Unfortunately, interfering substances may also bind during this step causing background problems. Using one of ICT's specially formulated assay diluents and sample diluents will reduce these non-specific binding interactions. ICT's wash buffer will help remove any unbound material between steps.

In the next step, the detection antibody binds to the analyte. If available, the detection antibody should be directly conjugated to a detection moiety such as HRP. Employing one of ICT's conjugate diluents will stabilize the enzyme-conjugated antibody and aid in suppressing non-specific binding of the enzyme-conjugated antibody to reduce background noise. If an enzyme-linked detection antibody is not available, then a labeled secondary antibody is added that will bind to the detection antibody. Lastly, a substrate is added for color development, and the color reaction can than be stopped. ICT has all of the solutions you need to build a better ELISA.

Coating Buffers:

5X Antibody Coating Buffer (CB1)

5X Antigen Coating Buffer (CB2)

- *Enhance adsorption of antibodies or antigens onto ELISA plates*
- *Stabilize tertiary structures of adsorbed antibodies and antigens*
- *Increase shelf-life of coated plates*
- *Use less capture reagent*

ICT'S COATING BUFFERS maximize the adsorption of proteins onto polystyrene plates while preserving their three-dimensional structure. This allows for greater binding reactivity with the detection molecule, thus enhancing the specific signal. By generating a higher specific signal, a lower concentration of coating antibody or antigen may be needed; thereby saving valuable reagents. Under proper storage conditions, coated plates may last for years enabling you to prepare large batches of plates at once and store them for future experiments.

- **5X Antibody Coating Buffer** (CB1) is used to coat antibodies onto plates. CB1 stabilizes and preserves the antigen recognition regions of the antibody. This allows for greater binding reactivity with the target antigen thereby enhancing the specific signal.
- **5X Antigen Coating Buffer** (CB2) is used to coat antigens onto plates to detect antibody binding events (often referred to as antigen-down ELISAs). CB2 stabilizes the adsorbed protein and preserves its antigenic regions.

Product	Size	Cat. #
5X Antibody Coating Buffer (CB1)	25 mL	6245
	100 mL	644
	500 mL	645
	1 L	646
	10 L	658
5X Antigen Coating Buffer (CB2)	25 mL	6246
	100 mL	6247
	500 mL	6248
	1 L	6249
	10 L	6250

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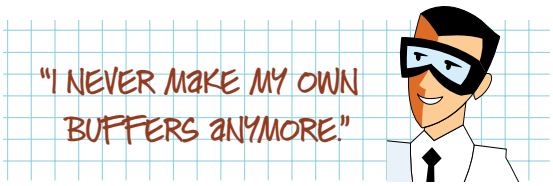
Blocking Buffers:

General Blocker with BSA (BB1)
Neptune Block (BB2)
SynBlock (BB3)
Phosph-Free Blocker (BB4)
Blocking Buffer Optimization Pack (BBOP)

- *Specific blockers for antibody-sandwich or antigen-down ELISAs*
- *Maintain the water of hydration of dried antigen or antibody coat proteins*
- *Minimize non-specific binding interactions during the assay process*
- *Increase shelf-life by improving the stability of the coated protein*
- *Reduce assay variability*

ICT'S BLOCKING BUFFERS are used to stabilize coated proteins on the ELISA plate by maintaining an optimal hydration level during the coating process. They are also used to block any non-specific binding regions of the adsorbed proteins, and any uncoated regions of the plate. This will reduce the OD of blank controls, and make positive results more reproducible. ICT has created 4 proprietary blocking buffer formulations for use with sandwich and antigen-down ELISAs to aid in optimizing your assay.

- **General Blocker** (BB1), with BSA, is for antigen-down and sandwich ELISAs requiring low to average blocking strength.
- **Neptune Block** (BB2), a non-mammalian blockers, provides extra blocking strength. This blocker is recommended for: antigen-down ELISAs; sandwich ELISAs with high backgrounds; and ELISAs testing human and other mammalian samples.
- **SynBlock** (BB3), with tween and inert synthetic blocking molecules, is designed for antigen-down and sandwich ELISAs requiring extra blocking strength.
- **Phosph-Free Blocker** (BB4), is a Tris-based buffer with tween and inert synthetic blocking molecules. It is specially formulated for alkaline-phosphatase (AP) enzyme assays. Use BB4 when the sample and the AP-conjugated enzyme are incubated simultaneously or anytime the fear of potential residual phosphate may be of concern.
- **Blocking Buffer Optimization Pack** (BBOP) contains our three most popular block buffers; 100mL of BB1, BB2 and BB3. Try all three to ascertain which blocker would work best in your assay.



Product	Size	Cat. #
General Blocker (BB1)	100 mL	632
	500 mL	633
	1 L	640
	10 L	659
Neptune Block (BB2)	100 mL	62
	500 mL	63
	1 L	64
	10 L	660
SynBlock (BB3)	100 mL	641
	500 mL	642
	1 L	643
	10 L	661
Phosph-Free Blocker (BB4)	100 mL	6262
	500 mL	6263
	1 L	6264
	10 L	6265
Block Buffer Optimization Pack (BBOP): 100mL of BB1, BB2, and BB3	3 bottles	957

Available in 4 sizes:
- **100 mL**
- **500 mL**
- **10 L**
- **1 L**

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Sample Diluents:

General Serum Diluent (SD1)
Plasma Sample Diluent (SD2)
Neptune Sample Diluent (SD3)
Sample Diluent Optimization Pack (SDOP)

- *Suitable for antibody-sandwich or antigen-down ELISAs*
- *Minimize non-specific binding interactions during the assay process*
- *Reduce sample variation*
- *Decrease background noise*

SAMPLE DILUENTS are used to dilute ELISA test samples so they read within the functional range of the assay. High-titer samples will overload the finite binding capacity of the coated ELISA plate, leading to inconsistent results, and decrease the specific signal. The right sample diluent will also aid in reducing false positives and decrease background noise by diluting any interfering proteins in the test sample. Diluting the test samples increases overall sensitivity and reduces sample variation. ICT has created 3 proprietary sample diluents for both sandwich and antigen-down ELISAs.

- **General Serum Diluent** (SD1) is specifically formulated for the dilution of mammalian and chicken serum samples into the functional range of the assay. SD1 contains a buffered BSA protein base to ensure a constant pH and a solute environment favorable to antibody-antigen interactions.
- **Plasma Sample Diluent** (SD2) is formulated specifically for use with plasma samples in an antigen-down ELISA format. SD2 can also be used for serum and plasma samples in antibody sandwich ELISAs. This BSA-based buffer contains additives to inhibit thrombin (clotting) and complement activity during the incubation period.
- **Neptune Sample Diluent** (SD3) is a non-mammalian protein solution highly recommended for use with serum or plasma samples (from porcine or bovine sources in an antigen-down format). Neptune Sample Diluent can also be used for human or other mammalian plasma samples in antibody-sandwich ELISAs.
- **Sample Diluent Optimization Pack** (SDOP) contains all three sample diluents; 100mL each of SD1, SD2 and SD3. Try all three to ascertain which diluent would work best in your assay.

Product	Size	Cat. #
General Serum Diluent (SD1)	100 mL	647
	500 mL	648
	1 L	649
	10 L	675
Plasma Sample Diluent (SD2)	100 mL	694
	500 mL	695
	1 L	696
	10 L	697
Neptune Sample Diluent (SD3)	100 mL	6124
	500 mL	6125
	1 L	6126
	10 L	6127
Sample Diluent Optimization Pack (SDOP): 100mL of each sample diluent	3 bottles	959

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SAMPLE CALCULATIONS

When diluting test samples, note the dilution factor for future data analysis. For example, if you diluted your sample 1:2 (250 uL serum sample into 250 uL sample diluent), it may yield an OD of 0.437. The standard curve in your assay indicates that an OD of 0.437 correlates to 200 pg/mL. However, the value must be multiplied by the dilution factor to generate the correct result: multiply 200 pg/mL by 2 (your dilution factor) yielding a value of 400 pg/mL. Thus the original sample contained 400 pg/mL of analyte. For more details and helpful ELISA hints, visit our website at www.immunochemistry.com.

Assay Diluents:

General Assay Diluent (AD1)
IgM-Reducing Assay Diluent (AD2)
Neptune Assay Diluent (AD3)
Antigen-Down Assay Diluent (AD4)
Assay Diluent Optimization Pack (ADOP)

- *Address matrix problems in antibody-sandwich or antigen-down ELISAs*
- *Minimize non-specific binding interactions during the assay process*
- *Reduce sample matrix interference*
- *Decrease background noise*

ASSAY DILUENTS equalize any differences between the sample matrix (serum, plasma, urine, cell culture media) and the diluent used to generate the standard curve. Assay diluents are pipetted directly onto the plate into every well just prior to adding the samples. Assay diluents reduce the effects of the sample matrix and variation among samples, without pre-dilution of the samples. Assay diluents can also reduce background noise caused by nonspecific interactions between the sample matrix proteins and the plate surface. ICT has developed 4 proprietary assay diluents for both sandwich and antigen-down ELISAs to aid in optimizing your assay.

- **General Assay Diluent** (AD1) can be used for serum and plasma samples tested in all antibody sandwich ELISAs. Use AD1 to inhibit complement and thrombin activity.
- **IgM-Reducing Assay Diluent** (AD2) can be used for serum and plasma samples tested in all antibody sandwich ELISAs. Use AD2 to inhibit complement and thrombin activity, and reduce IgM-mediated conjugate bridging interference.
- **Neptune Assay Diluent** (AD3) is formulated for use with plasma and serum samples (especially porcine and bovine serum) tested in antigen-down ELISAs. Use AD3 to inhibit complement and thrombin activity.
- **Antigen-Down Assay Diluent** (AD4) is formulated for use with serum and plasma samples tested in antigen-down ELISAs. Use AD4 to eliminate clotting of plasma samples in the ELISA plate well.
- **Assay Diluent Optimization Pack** (ADOP) contains all four of our assay diluents; 100mL of AD1, AD2, AD3 and AD4. Try all four to ascertain which assay diluent would work best in your assay.

Product	Size	Cat. #
General Assay Diluent (AD1)	100 mL	620
	500 mL	621
	1 L	622
	10 L	671
IgM-Reducing Assay Assay Diluent (AD2)	100 mL	623
	500 mL	624
	1 L	625
	10 L	672
Neptune Assay Diluent (AD3)	100 mL	626
	500 mL	627
	1 L	628
	10 L	673
Antigen-Down Assay Diluent (AD4)	100 mL	629
	500 mL	630
	1 L	631
	10 L	674
Assay Diluent Optimization Pack (ADOP): 100mL of each assay diluent	4 bottles	958

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Conjugate Stabilizers

5X Mono-Poly Conjugate Stabilizer (CS1)
5X Antigen-Down Conjugate Stabilizer (CS2)
5X Poly-Poly Conjugate Stabilizer (CS3)
5X Mono-Goat Poly Conjugate Stabilizer (CS4)
5X Mono-Rabbit Poly Conjugate Stabilizer (CS5)
5X Conjugate Stock Stabilizing Reagent (CS6)
1X Alkaline Phosphatase Enzyme Conjugate Stabilizer (CS7)

- *Extend the shelf-life of the diluted enzyme-conjugated antibody*
- *Minimize non-specific binding interactions during the assay process*
- *Provide stability to the enzyme conjugated-antibody complex*
- *Decrease background noise*

CONJUGATE STABILIZERS are used to reconstitute lyophilized enzyme-conjugated detection antibodies, and to dilute concentrated stock preparations of enzyme-conjugates. ICT's conjugate stabilizers support the immunoglobulin and HRP or AP components of the enzyme-antibody protein complex. This prevents the conjugate from falling apart and competing with the specific signal. It also increases the shelf-life of the diluted conjugate. ICT offers 7 conjugate stabilizer formulations for use with sandwich and antigen-down ELISAs.

- **Mono-Poly Conjugate Stabilizer** (CS1) is formulated for sandwich ELISAs that use a mouse monoclonal capture antibody coated on the plate, and a polyclonal-HRP conjugate for detection. CS1 contains mouse proteins that suppress the nonspecific binding of the polyclonal-HRP conjugated antibody to mouse immunoglobulin coated onto the plate.

- **Antigen-Down Conjugate Stabilizer** (CS2) is preferred for antigen-down ELISAs and for sandwich ELISAs using a tertiary IgG-HRP conjugated detection antibody. CS2 contains only non-mammalian additives, so it is ideal for assays that may be affected by albumin or other non-specific serum proteins.

- **Poly-Poly Conjugate Stabilizer** (CS3) is formulated for sandwich ELISAs using a polyclonal capture antibody and a polyclonal-HRP conjugate for detection. Proprietary additives make this diluent ideal for sandwich ELISAs using rabbit or goat polyclonal antibodies.

- **Mono-Goat Poly Conjugate Stabilizer** (CS4) is formulated for antibody sandwich ELISAs using a mouse monoclonal capture antibody and a goat polyclonal-HRP conjugate for detection. This diluent contains several unique additives including mouse IgG to specifically suppress nonspecific bridging of the goat polyclonal conjugate with the mouse capture IgG coated on the plate surface.

(continued)

Product	Size	Cat. #
5X Mono-Poly Conjugate Stabilizer (CS1)	25 mL	6168
	100 mL	698
	500 mL	699
	1 L	6100
	10 L	6101
5X Antigen-Down Conjugate Stabilizer (CS2)	25 mL	6169
	100 mL	6102
	500 mL	6103
	1 L	6104
	10 L	6105
5X Poly-Poly Conjugate Stabilizer (CS3)	25 mL	6170
	100 mL	6106
	500 mL	6107
	1 L	6108
	10 L	6109
5X Mono-Goat Poly Conjugate Stabilizer (CS4)	25 mL	6171
	100 mL	6110
	500 mL	6111
	1 L	6112
	10 L	6113

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Conjugate Stabilizers *(continued)*

- **Mono-Rabbit Poly Conjugate Stabilizer** (CS5) is formulated for antibody sandwich ELISAs using a mouse monoclonal capture antibody and a rabbit polyclonal-HRP conjugate for detection. This diluent contains several proprietary additives including mouse IgG to specifically suppress nonspecific bridging of the rabbit polyclonal conjugate with the mouse capture IgG coated on the plate surface.
- **Conjugate Stock Stabilizing Reagent** (CS6) is our most popular conjugate diluent. CS6 contains BSA as a protein stabilizer and magnesium and calcium salts to stabilize the catalytic site of the HRP porphyrin ring structure. Use CS6 to dilute newly reconstituted conjugates and to dilute the conjugate further for use in your assay. CS6 can also be used as a base formulation for creating your own unique conjugate diluent.
- **Alkaline Phosphatase Enzyme Conjugate Stabilizer** (CS7) is useful in any ELISA assay that employs an antigen or antibody conjugated to alkaline phosphatase. Alkaline phosphatase conjugates are stable to a concentration of 2 µg/mL when diluted in this solution. CS7 is provided ready-to-use at 1X.

Product	Size	Cat. #
5X Mono-Rabbit Poly Conjugate Stabilizer (CS5)	25 mL	6172
	100 mL	6114
	500 mL	6115
	1 L	6116
	10 L	6117
5X Conjugate Stock Stabilizing Reagent (CS6)	25 mL	6173
	100 mL	667
	500 mL	668
	1 L	669
	10 L	670
1X AP Enzyme Conjugate Stabilizer (CS7)	25 mL	6270
	100 mL	6271
	500 mL	6272
	1 L	6273
	10 L	6274

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Substrates:

One-component Substrates

TMB HRP Microwell Substrate (SUB1)

TMB Super Sensitive HRP Microwell Substrate (SUB2)

TMB Slow Kinetic HRP Microwell Substrate (SUB3)

ABTS HRP Microwell Substrate (SUB4)

AP pNPP Microwell Substrate (SUB5)

TMB HRP Membrane Substrate (SUB6)

BCIP/NBT Blue AP Membrane Substrate (SUB7)

- *Enhance the sensitivity of your ELISA*
- *Reduce background noise*
- *Provide linearity for enhanced reproducibility*
- *Non-toxic and environmentally friendly*

SUBSTRATES are used to generate the read-out signal of the ELISA assay. The signal generated is reflective of all the previous binding steps and the strength of the substrate itself. The substrate reacts with the peroxidase detection enzyme (HRP or AP), and the optical density (OD) of the resulting color reaction is read with a spectrophotometric plate reader. The relative sensitivity of a substrate is affected mainly by the formulation of the solution, the length of the incubation period of the enzyme-substrate reaction, and the titer of the target molecule in the assay. TMB (3,3',5,5'-tetramethylbenzidine), ABTS (2,2'-azino-di[3-ethylbenzthi-azoline sulfonate (6)] and pNPP (para-Nitrophenylphosphate) substrates are ideal for use with kinetic assays and can also be used with a stop solution for use in endpoint ELISAs. ImmunoChemistry Technologies provides 5 substrates for use in ELISA microwell formats and 2 substrates for use with nitrocellulose, PVDF membranes, and dot-blot assays.

- **TMB HRP Microwell Substrate** (SUB1) is our most popular substrate and provides the reference for performance of all the other HRP substrates offered. SUB1 is ideal for most ELISAs where the target is in the nanogram to picogram range. We recommend starting with this formulation when developing an assay to estimate the level of sensitivity. Then, if necessary, change formulations to increase or decrease sensitivity when optimizing your assay. SUB1 can be stopped with STOP1. Absorbance for SUB1 is read at 370 or 620-650 nm.

- **TMB Super Sensitive HRP Microwell Substrate** (SUB2) is our most sensitive TMB buffer. SUB2 is approximately 40-fold more sensitive than SUB1. SUB2 is useful when detecting very low levels of a target molecule, with samples that must be highly diluted (1:10,000), to amplify the signal when using antibodies with low binding capacity, and with samples that exhibit high steric hindrance. SUB2 can also be used to shorten the incubation time of the assay. SUB2 can be stopped with STOP1. Absorbance SUB2 is read at 370 or 620-650 nm.

- **TMB Slow Kinetic HRP Microwell Substrate** (SUB3) exhibits roughly 25% less sensitivity than SUB1. Lower sensitivity substrates are ideal for ELISAs where the test samples contain high levels of the target molecule, for assays with long incubation periods (such as overnight incubations), and for assays that simply do not require a high level of sensitivity. SUB3 can be stopped with STOP1. Absorbance for SUB3 is read at 370 or 620-650 nm.

- **ABTS HRP Microwell Substrate** (SUB4) Use ABTS for: samples with high levels of the target molecule; samples that do not have to be diluted very far (1:100); assays with long incubation periods (such as overnight incubations); and assays that simply do not require a high level of sensitivity. SUB4 can be stopped with STOP2. Absorbance for SUB4 is read at 405-410 nm.

- **AP pNPP Microwell Substrate** (SUB5) is used in ELISA assays to detect alkaline phosphatase-conjugated molecules. This formulation of pNPP substrate contains a stabilizer to extend the shelf life of the substrate on your benchtop. SUB5 can be stopped with STOP3.

- **TMB HRP Membrane Substrate** (SUB6) is useful for immuno-blotting applications where HRP-conjugated molecules are used for detection. SUB6 reacts with HRP yielding a dark blue reaction product. The formulation of this substrate does not contain any aprotic solvents.

- **BCIP/NBT AP Membrane Substrate** (SUB7) uses BCIP(5-bromo-4-Chloro-3'-Indolyphosphate p-Toluidine Salt) and NBT (Nitro-Blue Tetrazolium Chloride) for immunoblotting applications where alkaline phosphatase-conjugated molecules are used for detection. NBT serves as the oxidant and BCIP is the AP substrate. SUB7 reacts with AP yielding a bluish-purple reaction product.

(continued)

Substrates *(continued)*

Product	Size	Cat. #
TMB HRP Microwell Substrate (SUB1)	100 mL	6276
TMB Super Sensitive HRP Microwell Substrate (SUB2)	100 mL	6275
TMB Slow Kinetic HRP Microwell Substrate (SUB3)	100 mL	6277
ABTS HRP Microwell Substrate (SUB4)	100 mL	6278
AP pNPP Microwell Substrate (SUB5)	100 mL	6279
TMB HRP Membrane Substrate (SUB6)	100 mL	6280
BCIP/NBT AP Membrane Substrate (SUB7)	100 mL	6281

bulk pricing for larger volumes available on request

Stop Solutions:

Stop Solution for TMB Microwell Substrates (STOP1)
Stop Solution for ABTS Microwell Substrate (STOP2)
Stop Solution for AP Microwell Substrate (STOP3)

- *Stop the color development*
- *Standardize your readings*
- *Reduce variation for enhanced reproducibility*

STOP SOLUTIONS are used to prevent further color development of the substrate in an ELISA assay. The chromogenic signal is arrested in endpoint assays so that the read-out is indicative of the time the assay is stopped. A stop solution may also be added at the final time point in a kinetics assay.

- **Stop Solution for TMB Microwell Substrates** (STOP1) is a ready-to-use liquid stop solution. STOP1 is suitable for use with our TMB substrates SUB1, SUB2, and SUB3. This stop solution changes the TMB chromogen from blue to yellow, and hence the absorbance to 450 nm.
- **Stop Solution for ABTS Microwell Substrate** (STOP2) is a ready-to-use liquid stop solution. STOP2 is compatible with our ABTS substrate SUB4. This stop solution does not change the color or the absorbance of the ABTS chromogen; read the absorbance at 405 nm to 410 nm.
- **Stop Solution for AP Microwell Substrate** (STOP3) is a ready-to-use liquid stop solution. STOP3 is compatible with our alkaline phosphatase substrate SUB5. This stop solution does not change the color or the absorbance of the AP chromogen; read the absorbance at 405 nm to 420 nm.

Product	Size	Cat. #
Stop Solution for TMB Microwell Substrates (STOP1)	100 mL	6282
Stop Solution for ABTS Microwell Substrate (STOP2)	100 mL	6283
Stop Solution for AP Microwell Substrate (STOP3)	100 mL	6284

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Wash Buffer (10X): 10X ELISA Wash Buffer (WB1)

• **ELISA Wash Buffer** (WB1) is used to wash ELISA plates between reagent addition steps. WB1 removes unbound interfering material without compromising the positive signal. Consistently using WB1 will reduce background noise, increase the specific signal, and reduce variability between assays. To use WB1, simply dilute the buffer 1:10 (100mL WB1 to 900mL diH20). The buffer may be dispensed through a squirt bottle, a plate washer, or a multi-channel pipette to wash the microtiter plates.

Product	Size	Cat. #
10X ELISA Wash Buffer (WB1)	25 mL	6251
	100 mL	650
	500 mL	651
	1 L	652
	10 L	676

PBS Solution (10X): 10X Phosphate Buffered Saline (PB1)

• **Phosphate Buffered Saline** (PB1) can be used as a base to create your own ELISA buffers, and for other common laboratory applications. Improve consistency and save technician time by using ICT's preformulated PB1. To use PB1, simply dilute it 1:10 (100mL PB1 to 900mL diH20).

Product	Size	Cat. #
10X Phosphate Buffered Saline (PB1)	25 mL	6252
	100 mL	6157
	500 mL	6158
	1 L	6159
	10 L	6160

ELISA Development Kits:

Antigen-Down ELISA Kit (KIT1)

Ab-Sandwich ELISA Kit (KIT2)

Product	Size	Cat. #
Antigen-Down ELISA Kit (KIT1)	1 kit	9101
Ab-Sandwich ELISA Kit (KIT2)	1 kit	9100

ICT provides complete packs of assay reagents to facilitate the development of your own standard assay. Purchasing the assay pack is more economical than buying individual reagents. The assay packs contain enough of each reagent to run ten 96-well plate ELISAs. For a small restocking fee, we will gladly make substitutions to the packs to help customize your assay.

• **Antigen-Down ELISA Kit** R(Ä-¥¤¥) cont8@EJRJ<M<ER solutions recommended for generating your in-house Antigen-Down ELISA assay. The specific requirements of your assay may require the additional purchase of an assay diluent (AD4), sold separately. KIT1 contains:

25 mL CB2
25 mL CS2
500 mL WB1
100 mL STOP1
500 mL BB1
500 mL SD1
100 mL SUB1

• **Ab-Sandwich ELISA Kit** (Ä-¥¤¤) contains eight solutions recommended for assays where serum-free/non-mammalian reagents are necessary. KIT2 contains:

25 mL CB1
25 mL CS6
500 mL SD3
100 mL SUB1
500 mL BB2
100 mL AD3
500 mL WB1
100 mL STOP1

- *Kits contain enough reagents for 10 ELISA plates*
- *Cost effective*
- *Substitutions available on request*

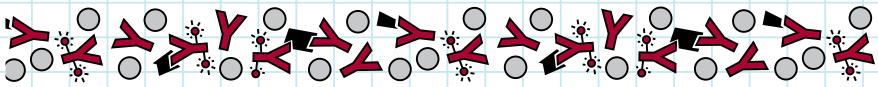
Accessories:

ELISA Plates
ELISA Plate Covers
Foil Bags
Desiccant Packets
96-Well Post-It Notes

Product	Size	Cat. #
Costar™ 96-Well Plate	1 plate	25
Immulon II™ 96-Well Plate	1 plate	227
ELISA Plate Covers	10 pack	6287
Foil Storage Bags	10 pack	6288
Desiccant Packets, 5 gm	10 pack	6289
96-Well ELISA Template Post-its	4 pads	6290

- **Costar™ 96-Well EIA Plate** is a flat-bottom, high-binding, clear polystyrene plate. It is comprised of 12 strips of 8 wells in a 96-well plate holder. ICT recommends Costar plates when coating antibodies (Corning #2592; Costar is a trademark of Corning, Inc.).
- **Immulon™ II 96-Well Plate** is a flat-bottom, clear polystyrene plate that is irradiated to provide higher binding affinity. ICT recommends Immulon™ II plates when coating antigens (Thermo #3355; Immulon is a trademark of ThermoLabsystems).
- **ELISA Plate Covers** are clear adhesive sheets of 4x6 inch heavy plastic to cover the microtiter plate when incubating your assay. These covers reduce evaporation of the sample liquid and prevent contaminants from entering the well. Cover your plate to avoid hot-spots and reduce intra-assay variation. Supplied in packs of 10.
- **Foil Storage Bags** are light-proof ~5x8" zip-lock heat-sealable bags that are designed to protect coated ELISA plates during storage. Foil bags prevent light from deteriorating the coated protein, and they eliminate fluctuations in humidity. Add a desiccant pack for more protection against moisture to increase shelf-life.
- **Desiccant Packets** are 5 gram packets of silica gel that absorb moisture. A desiccant packet should be included with each ELISA plate to stabilize the coated proteins during storage as humid conditions inside the plate bag will accelerate the break-down of coated proteins. A desiccant may inhibit this deterioration, thereby increasing the shelf-life of coated ELISA plates.
- **96-Well Plate Post-Its** are an exact template of a 96-well microtiter plate. Put your plate on the paper and never mix up your samples again. Each 4x6 inch pad contains 25 sheets. Supplied in packs of 4 (100 sheets total).

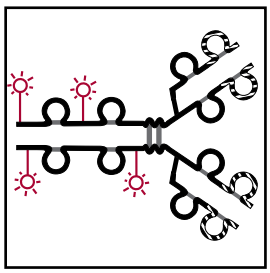
CUSTOM ASSAY DEVELOPMENT & CONSULTATION



ImmunoChemistry Technologies is a custom service laboratory specializing in immunoassay development and manufacturing. The scientists at ICT have the knowledge to develop reliable, sensitive, and specific immunoassays. ICT can develop immunoassays:

- for immunogenicity studies to detect IgG, IgE, IgM, and other molecules to measure the immune response to a specific drug.
- to test the potency of veterinary vaccines following USDA Rel. Pot. requirements.
- to measure proteins and peptides found in serum, plasma, urine, and cell culture fluids allowing researchers to better characterize biological systems.
- to measure enzymes used in food processing and industrial applications for precise quality control.

If you need to detect or measure a specific target molecule, ICT can fully develop a quick and accurate immunoassay (or optimize an existing assay) according to your specifications. Once developed, we will ship the components so the test can be used on-site by your staff, or in the field by your customers. Most of our reagents come ready-to-use with a shelf life of 1 year. We can then manufacture the test components whenever you need more. If the target analyte and necessary antibodies are available, assay development generally costs between $30,000 - $150,000 and takes 4-8 months. Once developed, continued production of the kit typically costs $200 - $500 per 96-well microtiter plate kit. The cost of manufacturing depends on the composition of the reagents and how many kits you will need in a year.



HRP-conjugated antibody.

If you need help with any immunochemistry project, such as custom conjugation, contact us for a consultation. Through our extensive experience in immunoassay development, we can provide current information and important insights into assay methods and related immunochemistry topics. For all development and consultation projects, ICT will provide a detailed quote of estimated time and expenses. Call ICT to get your project started.

IMPROVE THE PERFORMANCE OF YOUR ELISA.

ImmunoChemistry Technologies' unique ELISA reagents and products address the issues that typically occur during ELISA development - specificity, sensitivity, reproducibility, and shelf-life. ImmunoChemistry Technologies (ICT) offers a comprehensive line of high-quality buffers, diluents, stabilizers, and solutions for the preparation and execution of ELISA tests. These reagents have been specifically optimized for a 96-well microtiter plate system and can be applied in other assay techniques as well. Call ICT to get started on your ELISA.

SPEND TIME ON YOUR RESEARCH, NOT ON YOUR ASSAY Our ELISA experts have already optimized the ideal ELISA solutions so you don't have to spend time developing buffers.

MAKE YOUR ASSAY MORE SENSITIVE Using our assay solutions, you can increase the specific signal of your conjugates to increase sensitivity.

DECREASE BACKGROUND NOISE Prevent nonspecific binding problems from interfering with true positives.

REDUCE FALSE POSITIVES Our assay diluents and sample diluents minimize interference from other proteins within the sample matrix.

CONTROL ASSAY VARIABLES Our high-quality solutions are consistently manufactured and tested, so you know you are using the same reagent every time.

INCREASE REPRODUCIBILITY By using our consistent and reliable solutions, your ELISAs will become more reproducible.

CONSERVE VALUABLE REAGENTS By promoting a higher specific signal, less protein is needed to coat the plate, and less conjugate is needed to generate a higher specific signal.

INCREASE THE SHELF-LIFE OF YOUR PLATES Plates can be stored at RT or refrigerated for several months or even years using our solutions.

DON'T HALT YOUR RESEARCH TO MAKE ELISAS With optimized reagents with extended shelf-lives, you can create just one lot of materials for your entire study.

NEED HELP? Our ELISA experts can tell you which solutions would work best for your assay, and offer tips on ELISA techniques. Visit our website, email, or call us today.

2013 ELISA SOLUTIONS CATALOG

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