Store at -20°C

#63043

SignalStar™ Miniplex IHC Buffer Kit

Cell Signaling TECHNOLOGY®

1 Kit
(10 slides)

Support: +1-978-867-2388 (U.S.)
cellsignal.com/support

Orders: 877-616-2355 (U.S.)
orders@cellsignal.com

For Research Use Only. Not for Use in Diagnostic Procedures.

Product Includes	Item #	Kit Quantity	Storage Temp
SignalStar™ Antibody Diluent A	74462	1 x 1.6 mL	-20°C
SignalStar™ Antibody Diluent B	23858	1 x 800 µL	-20°C
SignalStar™ Amplification Buffer A	62861	1 x 12 mL	-20°C
SignalStar™ Amplification Buffer B	31325	1 x 12 mL	-20°C
SignalStar™ Amplification Oligo A - 488	15788	1 x 120 µL	-20°C
SignalStar™ Amplification Oligo B - 488	90573	1 x 120 µL	-20°C
SignalStar™ Amplification Oligo A - 594	28480	1 x 120 µL	-20°C
SignalStar™ Amplification Oligo B - 594	44014	1 x 120 µL	-20°C
SignalStar™ Amplification Oligo A - 647	61654	1 x 120 µL	-20°C
SignalStar™ Amplification Oligo B - 647	78041	1 x 120 µL	-20°C
SignalStar™ Amplification Oligo A - 750	89809	1 x 120 µL	-20°C
SignalStar™ Amplification Oligo B - 750	15682	1 x 120 µL	-20°C
SignalStar™ Ligation Buffer	78204	1 x 1.1 mL	-20°C
T4 DNA Ligase (5 U/µL)	88305	1 x 44 µL	-20°C
ATP (100 mM)	35118	1 x 22 µL	-20°C

Description: SignalStar multiplex immunohistochemistry (IHC) is an advanced technology for labeling multiple proteins simultaneously in tissue samples using specific primary antibodies and fluorescent detection reagents. This technology offers accuracy and reliability in visualizing and analyzing protein expression while maintaining spatial context and tissue architecture.

The SignalStar Miniplex IHC Buffer Kit is compatible with SignalStar Oligo-Antibody Pairs for use in fluorescent multiplex imaging experiments. This product is required to amplify and image the signal of 3-4 SignalStar Oligo-Antibody Pairs selected using the SignalStar Multiplex IHC Panel Builder. This buffer kit includes the reagents required for labeling 10 slides. SignalStar Multiplex IHC Kits & Reagents are not compatible with all of Cell Signaling Technology® products and protocols that are recommended for use in immunohistochemical assays.
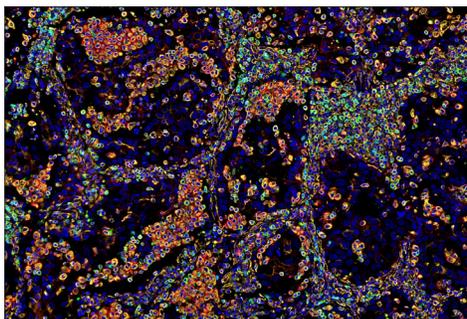
SignalStar™ multiplex immunohistochemical analysis of paraffin-embedded human non-small cell lung carcinoma using Vimentin (D21H3) & CO-0012-594 SignalStar™ Oligo-Antibody Pair #16471 (yellow), CD3ε (D7A6E™) & CO-0001-488 SignalStar™ Oligo-Antibody Pair #92856 (green), TIM-3 (D5D5R™) & CO-0010-647 SignalStar™ Oligo-Antibody Pair #15231 (red), TCF1/TCF7 (C63D9) & CO-0006-750 SignalStar™ Oligo-Antibody Pair #53114 (cyan), and ProLong Gold Antifade Reagent with DAPI #8961 (blue). All fluorophores have been assigned a pseudocolor, as indicated. Staining was performed on the BOND RX autostainer by Leica Biosystems.

Storage: All components in this kit are stable for at least 12 months when stored at the recommended temperature.

For product specific protocols, validation data, and a complete listing of recommended companion products, please see the product web page at cellsignal.com.

Reagents Not Supplied (Manual Protocol):

- SignalStain® EDTA Unmasking Solution (10X) #14747
- Xylene (for deparaffinization)
- Ethanol, anhydrous denatured, histological grade (100% and 95%)
- Decloaking Chamber (Biocare Medical, #DC2012)
- Tris Buffered Saline with Tween 20 (TBST-10X) #9997
- DAPI #4083
- ProLong Gold Antifade Reagent #9071
- Nuclease-free Water #12931
- 10% Neutral Buffered Formalin
- Low Retention Pipette Tips
- Slide Processing Containers
- Hydrophobic Barrier Pen
- Glass Coverslips
- Charged Slides
- Control Tissues

Reagents Not Supplied (BOND RX Protocol):

- Tris Buffered Saline with Tween 20 (TBST-10X) #9997
- DAPI #4083
- ProLong Gold Antifade Reagent #9071
- Nuclease-free Water #12931
- 10% Neutral Buffered Formalin
- Low Retention Pipette Tips

Available from Leica Biosystems (BOND RX Protocol):

- BOND Research Detection System #DS9455
- BOND Aspirating Probe Cleaning Kit #CS9100
- BOND Titration Kit (10 containers, 50 inserts) #OPT9049
- BOND Open Containers 30 mL (10 pack) #OP309700
- BOND Open Containers 7 mL (10 pack) #OP79193
- BOND Universal Covertiles (160 pack) #S21.4611
- BOND TM Epitope Retrieval 2-1 L (RTU) #AR9640
- BOND Dewax Solution 1 L (RTU) #AR9222
- BOND Wash Solution 10X Concentrate, 1L #AR9590

U.S. Patent No. 7,429,487, foreign equivalents, and child patents deriving therefrom.

All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for more information.

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Applications: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry FC-FP—Flow cytometry-Fixed/Permeabilized FC-L—Flow cytometry-Live E-P—ELISA-Peptide
**Species Cross-Reactivity: H**—human **M**—mouse **R**—rat **Hm**—hamster **Mk**—monkey **Mi**—mink **C**—chicken **Dm**—D. melanogaster **X**—Xenopus **Z**—zebrafish **B**—bovine **Dg**—dog **Pg**—pig **Sc**—S. cerevisiae **Ce**—C. elegans **Hr**—Horse
**All**—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.
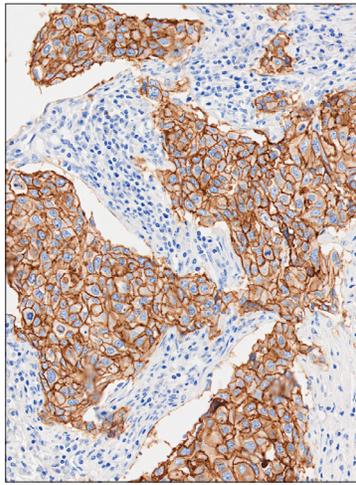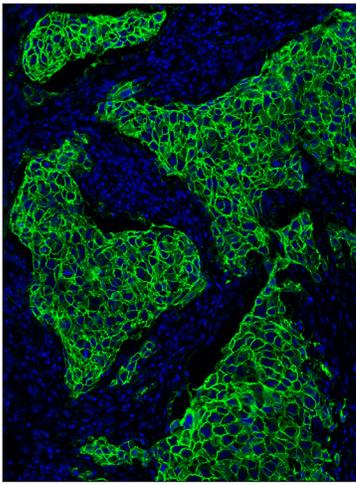
SignalStar™ multiplex immunohistochemical analysis of paraffin-embedded human infiltrating ductal carcinoma of the breast using HER2/ErbB2 (D8F12) & CO-0019-488 SignalStar™ Oligo-Antibody Pair #31149 (left, green) and ProLong Gold Antifade Reagent with DAPI #8961 (left, blue) compared to chromogenic immunohistochemical analysis of a serial section of paraffin-embedded human infiltrating ductal carcinoma of the breast using HER2/ErbB2 (D8F12) XP® Rabbit mAb #4290 (right). All fluorophores have been assigned a pseudocolor, as indicated. Staining was performed on the BOND RX autostainer by Leica Biosystems.
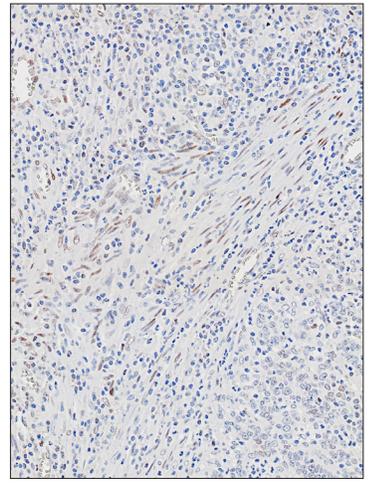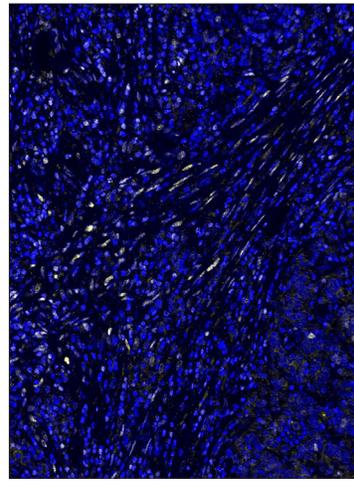

SignalStar™ multiplex immunohistochemical analysis of paraffin-embedded human gastric adenocarcinoma using Phospho-Stat3 (Tyr705) (D3A7) & CO-0029-594 SignalStar™ Oligo-Antibody Pair #86323 (left, yellow) and ProLong Gold Antifade Reagent with DAPI #8961 (left, blue) compared to chromogenic immunohistochemical analysis of a serial section of paraffin-embedded human gastric adenocarcinoma using Phospho-Stat3 (Tyr705) (D3A7) XP® Rabbit mAb #9145 (right). All fluorophores have been assigned a pseudocolor, as indicated. Staining was performed on the BOND RX autostainer by Leica Biosystems.
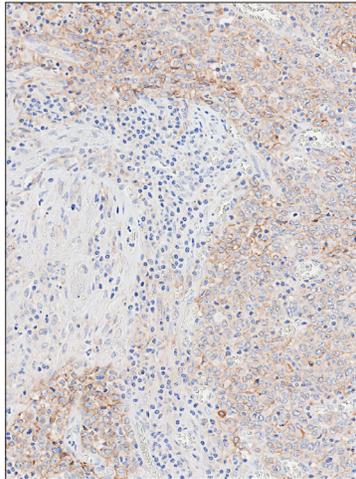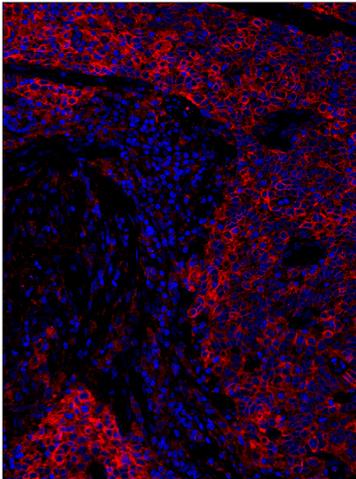

SignalStar™ multiplex immunohistochemical analysis of paraffin-embedded human gastric adenocarcinoma using PD-L1 (E1L3N®) & CO-0005-647 SignalStar™ Oligo-Antibody Pair #52085 (left, red) and ProLong Gold Antifade Reagent with DAPI #8961 (left, blue) compared to chromogenic immunohistochemical analysis of a serial section of paraffin-embedded human gastric adenocarcinoma using PD-L1 (E1L3N®) XP® Rabbit mAb #13684 (right). All fluorophores have been assigned a pseudocolor, as indicated. Staining was performed on the BOND RX autostainer by Leica Biosystems.
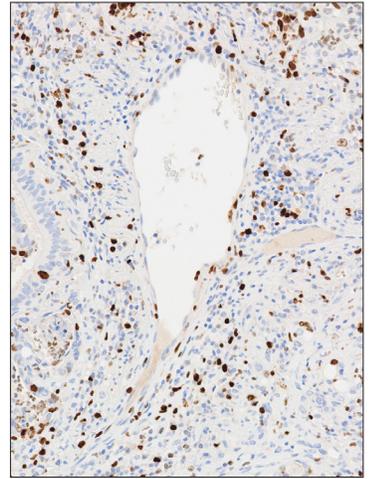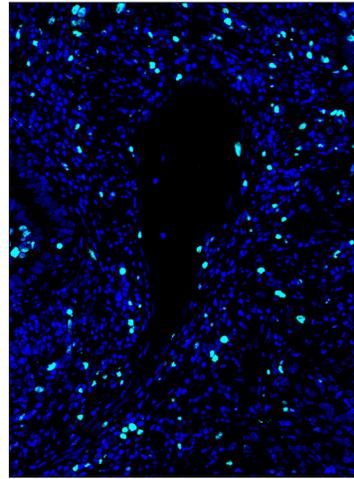

SignalStar™ multiplex immunohistochemical analysis of paraffin-embedded human colorectal adenocarcinoma using Ki-67 (8D5) & CO-0014-750 SignalStar™ Oligo-Antibody Pair #56398 (left, cyan) and ProLong Gold Antifade Reagent with DAPI #8961 (left, blue) compared to chromogenic immunohistochemical analysis of a serial section of paraffin-embedded human colorectal adenocarcinoma using Ki-67 (8D5) Mouse mAb #9449 (right). All fluorophores have been assigned a pseudocolor, as indicated. Staining was performed on the BOND RX autostainer by Leica Biosystems.

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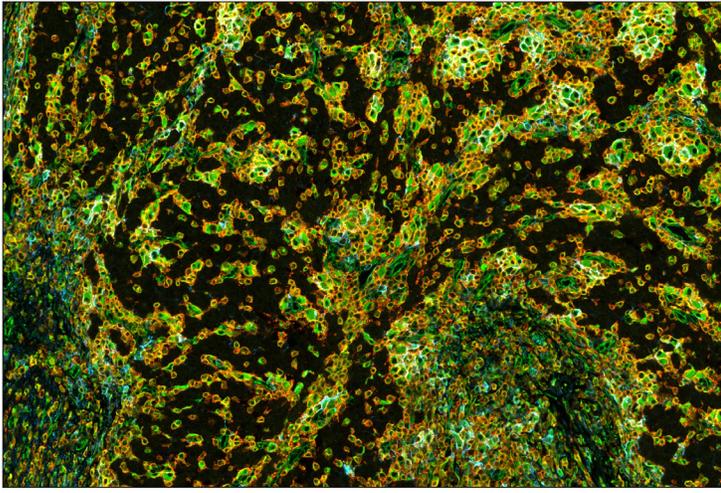
SignalStar™ multiplex immunohistochemical analysis of paraffin-embedded human gastric adenocarcinoma using Vimentin (D21H3) & CO-0012-488 SignalStar™ Oligo-Antibody Pair #96317 (green), SIRPα/SHPS1 (D6I3M) & CO-0034-594 SignalStar™ Oligo-Antibody Pair #60004 (yellow), CD45 (Intracellular Domain) (D9M8I) & CO-0013-647 SignalStar™ Oligo-Antibody Pair #32740 (red), and CD44 (E7K2Y) & CO-0030-750 SignalStar™ Oligo-Antibody Pair #18266 (cyan). All fluorophores have been assigned a pseudocolor, as indicated.
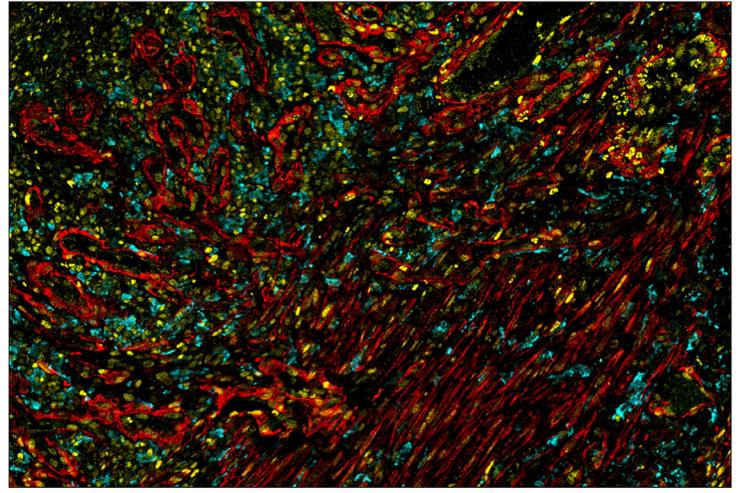
SignalStar™ multiplex immunohistochemical analysis of paraffin-embedded human gastric adenocarcinoma using Phospho-Stat3 (Tyr705) (D3A7) & CO-0029-594 SignalStar™ Oligo-Antibody Pair #86323 (yellow), α-Smooth Muscle Actin (D4K9N) & CO-0024-647 SignalStar™ Oligo-Antibody Pair #63902 (red), and CD163 (D6U1J) & CO-0022-750 SignalStar™ Oligo-Antibody Pair #71043 (cyan). All fluorophores have been assigned a pseudocolor, as indicated.
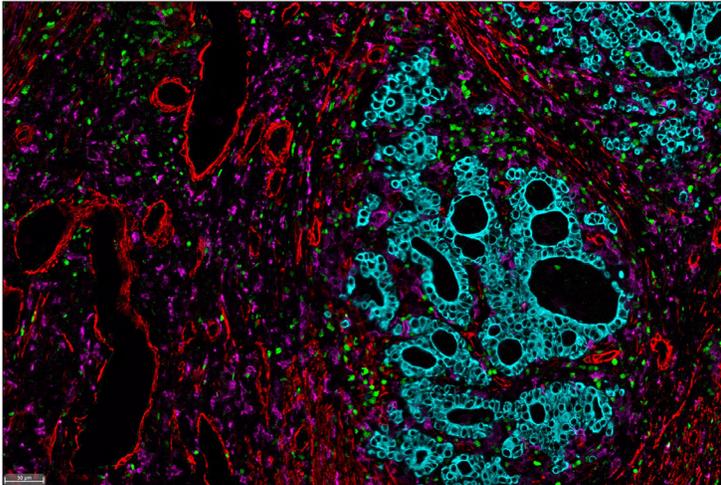
SignalStar™ multiplex immunohistochemical analysis of paraffin-embedded human gastric adenocarcinoma using CD163 (D6U1J) & CO-0022-594 SignalStar™ Oligo-Antibody Pair #43547 (magenta), Tox/Tox2 (E6I3Q) & CO-0016-488 SignalStar™ Oligo-Antibody Pair #31189 (green), α-Smooth Muscle Actin (D4K9N) & CO-0024-647 SignalStar™ Oligo-Antibody Pair #63902 (red), and Pan-Keratin (C11) & CO-0003-750 SignalStar™ Oligo-Antibody Pair #97227 (cyan). All fluorophores have been assigned a pseudocolor, as indicated. Staining was performed on the BOND RX autostainer by Leica Biosystems.