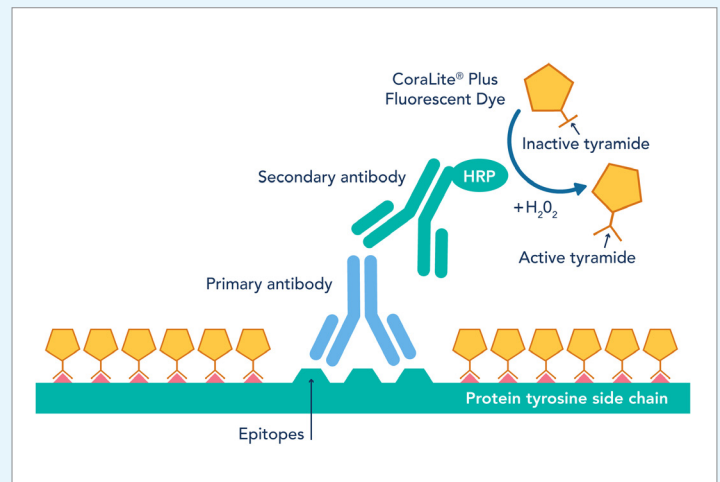




Tyramide Signaling Amplification (TSA) Reagents

Achieve up to 5-plex imaging with our CoraLite® Plus-Tyramide Reagents and Detection Kits

- Up to 100x more sensitive than indirect staining methods
- Ready-to-use, no pre-optimization needed
- Wide dynamic range enables detection of low-abundance targets
- Easy multiplexing with no limitations on primary antibody host

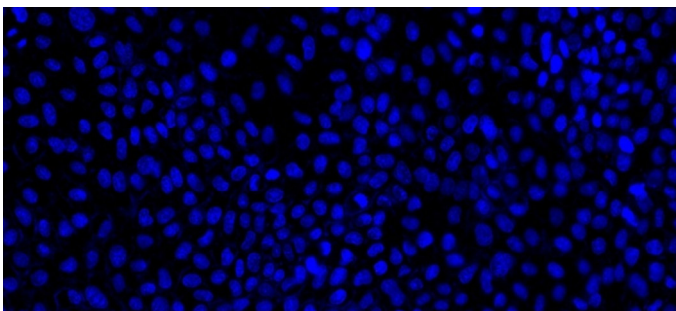


Proteintech's CoraLite® Plus-Tyramide dyes are fluorescent labeling reagents based on TSA technology. Upon interaction with HRP, the tyramides are oxidized into free radicals, allowing the dyes to form covalent bonds with nearby tyrosine residues on the antigen of interest. Compared to indirect staining methods, TSA dyes can enhance the fluorescent signal by several

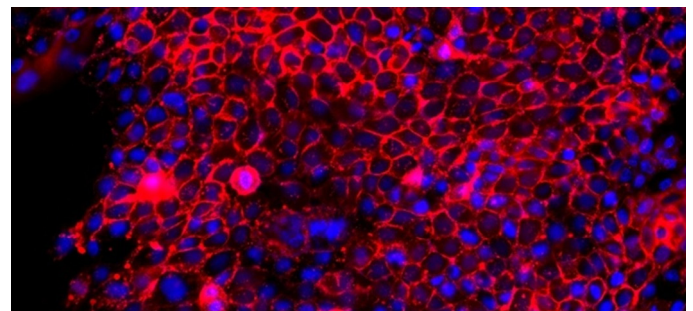
hundredfold due to dye accumulation and direct labeling of the target. This makes them particularly useful for the detection of low-abundance targets. Furthermore, this system is highly suitable for tissue multiplexing as multiple TSA dyes can be sequentially added through cyclical antibody stripping and reprobing.

Identify Low Abundance Targets with Ease

Detection of IL-17RA Polyclonal Antibody (Cat. No. 32055-1-AP) in A431 Cells

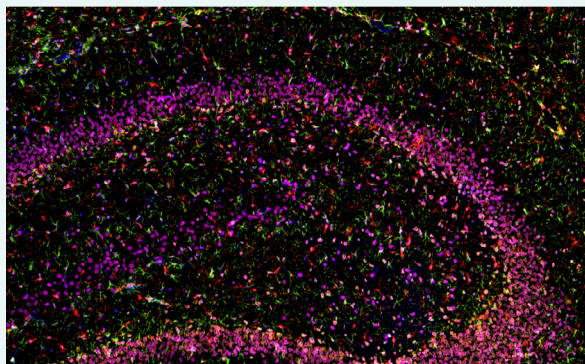


With Multi-rAb CoraLite® Plus 594 Recombinant Secondary (RGAR004)



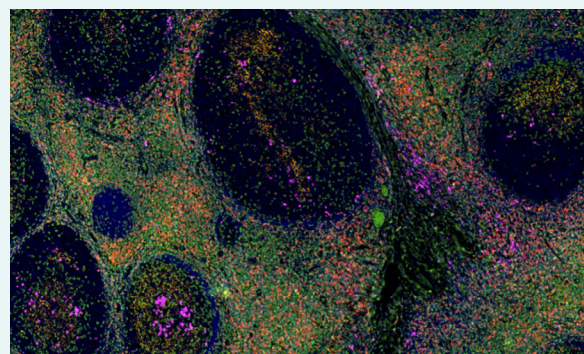
With Multi-rAb Polymer-HRP Recombinant Secondary (RGAR011) and CoraLite® Plus 594 Tyramide Reagent (PR30024)

Achieve High-Quality Multiplexed Data



FFPE rat brain tissue was stained with Lamin B1 monoclonal antibody (Cat. No. 66095-1-Ig) at 1:2000, followed by detection with Multi-rAb® Polymer HRP-Goat Anti-Rabbit/Mouse Universal Recombinant Secondary Antibody (H+L). CoraLite® Plus 555-Tyramide Reagent was used for signal development (yellow). HIER was then performed in pH 9.0 Tris-EDTA buffer, followed by staining with GFAP monoclonal antibody (Cat. No. 60190-1-Ig, 1:20,000). CoraLite® Plus 488-Tyramide Reagent was used for signal development (green). Similarly, IBA1 recombinant antibody (Cat. No. 81728-1-RR, 1:2000) TDP-43 recombinant antibody (Cat. No. 80002-1-RR, 1:3200) were stained subsequently. CoraLite® Plus 594-Tyramide Reagent (red) and CoraLite® Plus 647-Tyramide Reagent (purple) were used for signal development, respectively. Finally, cell nuclei (blue) were stained with DAPI.

FFPE human tonsillitis tissue was stained with CD23 monoclonal antibody (Cat. No. 60208-2-Ig) at 1:8000 followed by detection with Multi-rAb® Polymer HRP-Goat Anti-Rabbit/Mouse Universal Recombinant Secondary Antibody (H+L). CoraLite® Plus 555-Tyramide Reagent was used for signal development (yellow). HIER was then performed in pH 9.0 Tris-EDTA buffer, followed by staining with CD3 monoclonal antibody (Cat. No. 60181-1-Ig, 1:10000). CoraLite® Plus 488-Tyramide Reagent were used for signal development (green). Similarly, CD8a monoclonal antibody (Cat. No. 66868-1-Ig, 1:20000) and CD138 monoclonal antibody (Cat. No. 67155-1-Ig, 1:10000) were stained subsequently. CoraLite® Plus 594-Tyramide Reagent (red) and CoraLite® Plus 647-Tyramide Reagent (purple) were used for signal development respectively. Finally, cell nuclei (blue) were stained with DAPI.



Our Offering

CoraLite® Plus-Tyramide Reagents

CoraLite® Plus-Tyramide Reagents can be used with any HRP-conjugated secondary antibody for multiplexed IHC, ICC, or ISH experiments.

CoraLite® Plus-Tyramide Reagents

TSA Detect Kits are a complete fluorescent IHC workflow solution for tissue multiplexing. They include either 3 or 4 tyramide reagents, DAPI nuclear stain, a Multi-rAb® Poly HRP Recombinant Secondary Antibody, quenching buffer, blocking buffer, and amplification buffer.

| TSA Detect Kits | |
|-------------------------------------|-------------|
| Kit | Catalog No. |
| CoraLite® Plus 488-Tyramide Reagent | PR30022 |
| CoraLite® Plus 555-Tyramide Reagent | PR30023 |
| CoraLite® Plus 594-Tyramide Reagent | PR30024 |
| CoraLite® Plus 647-Tyramide Reagent | PR30025 |

| TSA Detection Kits | |
|---|-------------|
| Kit | Catalog No. |
| Four Color TSA Detect Kit for Rabbit/Mouse Primary Antibodies | PK10032 |
| Four Color TSA Detect Kit for Rabbit Primary Antibody | PK10033 |
| Five Color TSA Detect Kit for Rabbit/Mouse Primary Antibodies | PK10034 |
| Five Color TSA Detect for Rabbit Primary Antibody | PK10035 |