

## Product Introduction

TSA (Tyramide Signal Amplification) dyes are fluorescent labelling reagents based on tyramide signal amplification technology. Catalyzed by HRP, TSA dyes form covalent bonds with tyrosine residues on proteins near HRP and accumulate, thereby amplifying the signal. Compared to indirect detection using directly labeled fluorescent primary antibodies or fluorescent secondary antibodies, the TSA system can enhance the signal by several hundred-fold. Furthermore, the covalent bonds formed with the sample are stable and do not easily detach, making this technique useful for experiments such as multiplex immunofluorescence and in situ hybridization.

This product contains 100 µL CoraLite®Plus 647-TSA dye and 5 mL of amplification buffer, sufficient to stain approximately 50 tissue sections or cell slides. Note that the number of uses may vary slightly depending on the size of the slides. Please prepare or purchase other reagents required for your experiment.

The maximum absorption wavelength of the fluorescence signal of this product is 654 nm, and the maximum emission wavelength is 674 nm. Please use an appropriately configured imaging device for imaging.

## Package

50 T

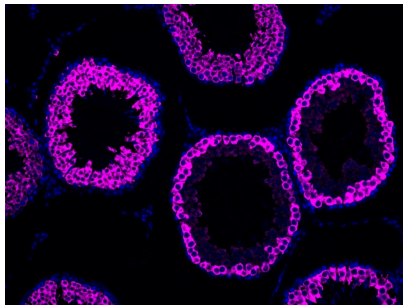
## Storage

Store at 2-8°C, valid for 12 months.

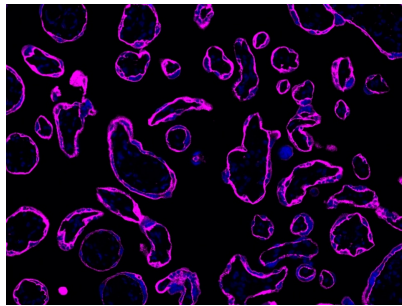
## Precautions

1. If performing multiplexed staining, it is generally recommended to stain low-abundance targets or weak antibodies first. For example, when using Proteintech TSA dyes, the recommended color matching order is: 555-488-594-647. Also, since CoraLite®Plus 555-TSA and CoraLite®Plus 594-TSA have similar wavelengths and are prone to bleed-through, it is recommended that CoraLite®Plus 555-TSA and CoraLite®Plus 594-TSA used with weakly positive primary antibodies.
  2. If performing multiplexed staining, it is recommended to first perform single staining to explore the optimal conditions for different targets before performing multiple rounds of staining to reduce unnecessary waste and facilitate analysis of results.
  3. During the operation, when adding liquid to the sample at any step, ensure that there are no bubbles in the liquid, otherwise abnormal staining such as plaques will form. When adding liquid, be careful not to scratch the tissue.
- Pay attention to the tissue sections or cell samples during the experiment and prevent them from drying out.

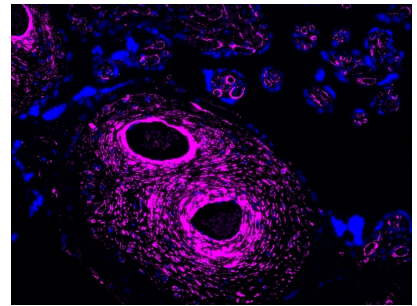
## Validation Data



IF Staining using Coralite®Plus 647-Tyramide Reagent PR30025. FFPE-rat testis tissue was stained with 13720-1-AP (BOULE polyclonal antibody) at 1:2000 followed by detection of Multi-rAb® Polymer HRP-Goat Anti-Rabbit/Mouse Universal Recombinant Secondary Antibody (H+L) (Cat.NO. RGAU011). Coralite®Plus 647-Tyramide Reagent... (Cat.NO. PR30025) was used for signal development. Cell nucleus (blue) was stained with DAPI.



IF Staining using Coralite®Plus 647-Tyramide Reagent PR30025. FFPE-human placenta tissue was stained with 30031-1-AP (SLC43A2 polyclonal antibody) at 1:500 followed by detection of Multi-rAb® Polymer HRP-Goat Anti-Rabbit/Mouse Universal Recombinant Secondary Antibody (H+L) (Cat.NO. RGAU011). Coralite®Plus 647-Tyramide... Reagent (Cat.NO. PR30025) was used for signal development. Cell nucleus (blue) was stained with DAPI.



IF Staining using Coralite®Plus 647-Tyramide Reagent PR30025. FFPE-human placenta tissue was stained with 67882-1-Ig (LPCAT3 Monoclonal antibody) at 1:1000 followed by detection of Multi-rAb® Polymer HRP-Goat Anti-Rabbit/Mouse Universal Recombinant Secondary Antibody (H+L) (Cat.NO. RGAU011). Coralite®Plus 647-Tyramide... Reagent (Cat.NO. PR30025) was used for signal development. Cell nucleus (blue) was stained with DAPI.

**For technical support and original validation data for this product please contact**

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**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**