

**Anti-YFP-SAP**
TAG-TARGETED TOXIN

a tool for eliminating YFP and EYFP expressing cells; targeted via mouse monoclonal antibody to green fluorescent protein, eliminated via saporin

Catalog Number: IT-66
Quantity: 25 micrograms, 100 micrograms, 250 micrograms
Format: PBS (0.14 M Sodium Chloride; 0.003 M Potassium Chloride; 0.002 M Potassium Phosphate; 0.01 M Sodium Phosphate; pH 7.4), no preservative. Sterile-filtered.
Clone: GFP.C2

Background: Tag-targeted toxins are powerful and specific lesioning agents used in the technique known as Molecular Surgery. The ribosome-inactivating protein, saporin (from the seeds of the plant, *Saponaria officinalis*) is bound to a targeting agent that recognizes YOUR cells expressing proteins tagged with YFP and EYFP. Once the conjugate is internalized, saporin breaks away from the targeting agent, and inactivates the ribosomes which causes protein inhibition and, ultimately, cell death. Cells that do not have the cell surface marker are not affected.

Yellow fluorescent protein (YFP) is a derivative of Green fluorescent protein (GFP) and produced by the T203Y genetic mutation. YFP absorbs green color light at 514 nm wavelength and emits a yellow color light at 527 nm and is commonly used as a non-invasive intracellular pH biosensor or fluorescent indicator for local Ca²⁺ concentrations.

Specificity & Preparation: This tag-targeted toxin recognizes YFP and EYFP-labeled cells to evaluate the expression of your target cell of interest. Anti-YFP-SAP is a bonded conjugate of biotinylated mouse monoclonal antibody to an N-terminal peptide-KLH conjugate representing GFP from the jellyfish *Aequorea Victoria*, and the secondary conjugate Streptavidin-ZAP containing the ribosome-inactivating protein, saporin.

Usage: Anti-YFP-SAP specifically eliminates cells with extracellular expression of YFP and EYFP-tagged proteins and cells that recognize YOUR YFP and EYFP-tagged recombinant proteins. **There may be lot-to-lot variation in material; working dilutions must be determined by end user. If this is a new lot, you must assess the proper working dilution before beginning a full experimental protocol.**

Storage: Gently spin down material 5-10 seconds in a microfuge before use. Store the material in undiluted aliquots at -20°C for 1-2 months. For longer term storage store the material at -80°C. Material should be aliquoted to a convenient volume and quantity to avoid repeated freezing and thawing that can damage the protein content. Under these conditions, the material has a very stable shelf-life. Thawing should be done at room temperature or on ice. The thawed solution should remain on ice until use.

Do not use a reducing agent (such as dithiothreitol, beta-mercaptoethanol or ascorbic acid) with this material. It will inactivate the toxin.

This material is an extremely potent cytotoxin. Handling should be done by experienced personnel. Gloves and safety glasses are required when handling this product. Care in disposal is mandatory; autoclaving or exposure to 0.2 M sodium hydroxide will inactivate the material. All labware that comes into contact with this material should be likewise treated.

Note: When used in a cytotoxicity assay, un-bound primary antibody will compete with primary antibody bound to Anti-YFP-ZAP and may reduce cytotoxicity through competitive inhibition of the primary antibody-secondary conjugate complex.



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Control(s): BIgG-SAP Mouse

Safety:

Good laboratory technique must be employed for safe handling of this product. This requires observation of the following practices:

1. Wear appropriate laboratory attire, including lab coat, gloves and safety glasses.
2. Do not pipet by mouth, inhale, ingest or allow product to come into contact with open wounds. Wash thoroughly any part of the body which comes into contact with the product.
3. Avoid accidental autoinjection by exercising extreme care when handling in conjunction with any injection device.
4. This product is intended for research use by qualified personnel only. It is not intended for use in humans or as a diagnostic agent. Advanced Targeting Systems is not liable for any damages resulting from the misuse or handling of this product.

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