ADVANCED TARGETING SYSTEMS

10451 ROSELLE STREET, #300, SAN DIEGO, CA 92121
TELEPHONE (858) 642-1988 • FAX (858) 642-1989
WWW.ATSBIO.COM • ATS@ATSBIO.COM

Mab-ZAP
SECONDARY CONJUGATE

[affinity-purified goat anti-mouse IgG]-saporin
uses YOUR mouse monoclonal antibody to target and eliminate cells

Catalog Number: IT-04
Quantity: 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.
Host: Goat

Background:
Mab-ZAP uses your primary mouse monoclonal IgG antibody to target and eliminate cells that recognize your primary antibody. This secondary conjugate uses the secondary antibody (affinity-purified goat anti-mouse IgG) to "piggyback" onto YOUR mouse primary antibody. Mab-ZAP can be utilized for screening mouse IgG antibodies for internalization and/or their suitability to make potent immunotoxins.

Specificity and Preparation:
This secondary conjugate recognizes YOUR mouse monoclonal antibody. Mab-ZAP is a chemical conjugate of affinity-purified goat anti-mouse IgG and the ribosome-inactivating protein, saporin. This product is routinely tested by cytotoxicity assay.

Usage and Storage:
Mab-ZAP uses your mouse primary antibody to target and eliminate cells. This secondary conjugate is used to evaluate the potential of a primary antibody to internalize. **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.**
Gently spin down material before use; 5-10 seconds in a microfuge should be adequate. The material should be stored at -20°C in undiluted aliquots. 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.
If the primary antibody recognizes a human receptor the conjugate will be toxic to human cells expressing the appropriate receptor. 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 Mab-ZAP and may reduce cytotoxicity through competitive inhibition of the primary antibody-secondary conjugate complex.

ADVANCED TARGETING SYSTEMS

10451 ROSELLE STREET, #300, SAN DIEGO, CA 92121
TELEPHONE (858) 642-1988 • FAX (858) 642-1989
WWW.ATSBIO.COM • ATS@ATSBIO.COM

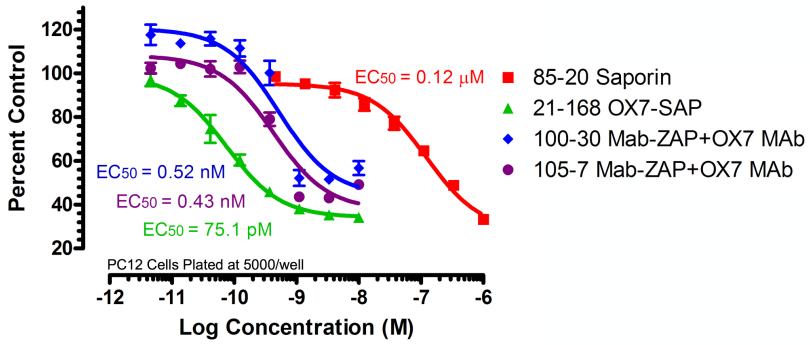
Mab-ZAP
SECONDARY CONJUGATE

Available Control(s): Goat IgG-SAP

References:
1. Kohls MD, Lappi DA (2000) Mab-ZAP: A tool for evaluating antibody efficacy for use in an immunotoxin. *BioTechniques* 28(1):162-165.

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.

To view protocol(s) for this and other products please visit: www.ATSbio.com/protocols



PC12 cells were plated at 5000 cells/90 µl/well and incubated overnight. Saporin (PR-01) and OX7-SAP (IT-02) dilutions were made in cell media and 10 µl was added to each well. OX7 antibody was diluted in cell media containing, at a final concentration, 100 ng/10 µl Mab-ZAP (IT-04), and 10 µl was added to each well. The plates incubated 72 hours. To develop the plates, the medium was removed and 50 µl of 0.4% sulforhodamine-B in 1% acetic acid was added to each well and the plates incubated for 30 minutes at room temperature. The plates were then washed three times with 1% acetic acid and allowed to air dry. The dye was solubilized with 100 µl of 10 mM unbuffered Tris-Base per well, with 5 minutes of gentle shaking. The plates were read at 564 nm and data analysis was done with Prism software (GraphPad, San Diego).