Targeting Tools: Featured Products

mu p75-SAP

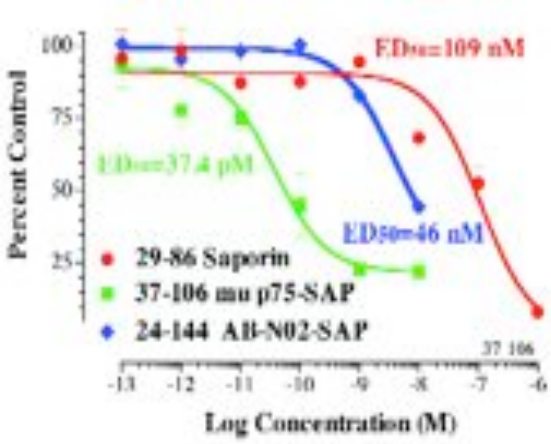
In 2004, ATS re-designed the anti-murine p75-SAP targeted toxin (mu p75-SAP, Cat. #IT-16) and produced a conjugate that is much more potent in our *in vitro* cell cytotoxicity assays. Previously, we used a rat monoclonal antibody. This antibody had been outperformed by our rabbit polyclonal (Cat. #AB-N01), in several assays, especially flow cytometry analysis of murine p75-expressing cells. This is an important indicator of being able to bind to the cell surface, which is fundamental for a targeted toxin.

To create this toxin, we affinity-purified the rabbit polyclonal (Cat. #AB-N01AP) with the immunogen bound to a solid support, and conjugated the affinity-purified antibody to saporin. As can be seen in the cytotoxicity assay on the right, the new mu p75-SAP is orders of magnitude more potent than the previous conjugate. The new and more active version of mu p75-SAP has an ED50 in the picomolar range compared to an ED50 in the nanomolar range for the previous product. We believe that the greater potency will translate to smaller amounts used for elimination of p75-positive neurons in the mouse brain, and that this will result in a greater index of efficacy and lesser non-specific cytotoxicity. (see cover article for *in vivo* results).

The mu p75-SAP kit includes, in addition to the immunotoxin, equal aliquots of saporin (Cat. #PR-01), the affinity-purified rabbit polyclonal antibody (AB-N01AP), and the control immunotoxin, Rabbit-IgG-SAP (Cat. #IT-35).

Also available are fluorescent conjugates of AB-N01AP: Cy3-labeled Anti-murine NGFr (Cat. #FL-05), and Cy5-labeled Anti-murine NGFr (Cat. #FL-06).

Ahh. The joys of Spring!



NG3 cells are plated at 1000 cells/well and incubated overnight. Saporin, mu p75-SAP (conjugate of the affinity-purified rabbit polyclonal to mouse NGFr and saporin), and AB-N02-SAP (previous rat monoclonal version of mu p75-SAP) are added in 10-μl volumes and the plates are incubated 72 hours. PMS/MTS developing reagent is added and the plates are incubated 1-2 hours, then read at 490 nm.

Flow Cytometry Tools

Advanced Targeting Systems is excited to offer two new tools for flow cytometry.

WBLyse™ (Cat. #FL-08) is a gentle erythrocyte lysing reagent matched with a leukocyte preservative. This kit can be used to enumerate lymphocyte subsets, detect a large variety of antigens on lymphocytes, and to identify other leukocyte subsets, including CD34 stem cells, and granulocytes. WBLyse™ works on many types of specimens and is active against all erythrocytes and is available in the 100 or 500 test size.

The CFSE (carboxyfluorescein-succinimidyl ester) Compensation Kit (Cat. #FL-13) provides a reproducible and convenient source of CFSE particles for evaluating and correcting for the spectral overlap between CFSE and other dyes. Fluorescence compensation is the process wherein a portion of the primary dye signal is removed from all non-primary dye channels. Compensation is generally required whenever more than a single dye (color) is used in flow cytometric analysis. This 1-color CFSE Compensation Kit is sufficient for 25 tests and contains negative/unstained microspheres and CFSE microspheres. Cells, once labeled with CFSE, can be stimulated *in vitro* and cell proliferation measured by changes in the staining intensity of the cells.