

# Targeting Tools: Featured Products

## Antibody to Metabotropic Glutamate Receptor 2

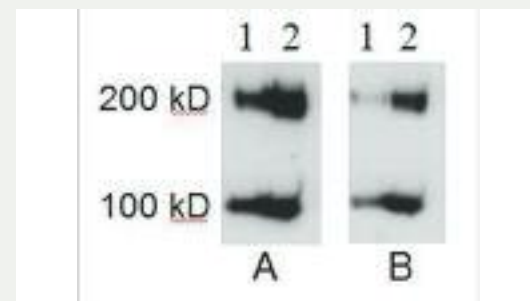
There are eight known metabotropic glutamate receptors (mGluR) playing diverse roles in brain function and pathology. They are 7-transmembrane domain receptors involved in learning, memory, anxiety, synaptic plasticity, and pain perception. The ligand for these receptors is glutamate, which functions as an excitatory neurotransmitter. mGluR2 is involved in the inhibition of the cAMP cascade. Potentiation of mGluR2 has recently emerged as a new approach for the treatment of schizophrenia.

**Anti-mGluR2 (Cat. #AB-N32)** is a mouse monoclonal antibody against a GST fusion protein containing a 47-amino acid sequence from the C-terminal domain of mGluR2. It has been tested in western blot on rat cortical tissue extracts.

*Currently in Production: anti-mGluR5*

### References

1. Neki A, Ohishi H, Kaneko T, Shigemoto R, Nakanishi S, Mizuno N (1996) Pre- and postsynaptic localization of a metabotropic glutamate receptor, mGluR2, in the rat brain: an immunohistochemical study with a monoclonal antibody. *Neurosci Lett* 202(3):197.
2. Neki A, Ohishi H, Kaneko T, Shigemoto R, Nakanishi S, Mizuno N (1996) Metabotropic glutamate receptors mGluR2 and mGluR5 are expressed in two non-overlapping populations of Golgi cells in the rat cerebellum. *Neuroscience* 75(3):815-826.



**Anti-mGluR2 (Cat. #AB-N32)**

Rat cortical tissue extracts were run on SDS-PAGE (5  $\mu$ g in lane 1, 25  $\mu$ g in lane 2 for each blot). AB-N32 was applied to blot A at a 1:500 dilution, and blot B at 1:2000. Both blots were incubated with an anti-mouse-HRP secondary antibody at 1:10,000. The protein was run under reducing conditions (40 mM DTT); both monomer and dimer forms of mGluR2 are recognized.

*Data provided by Marek Schwendt*

## Tag-Targeted Toxins

Tag-targeted toxins are new conjugates in the Targeted Toxins family. Antibodies specific for tags on expressed proteins are conjugated to the ribosome-inactivating protein, saporin (from the seeds of the plant, *Saponaria officinalis*). The conjugate binds to your tag that is expressed on the cell surface and then internalizes by antibody-mediated endocytosis. Saporin breaks away from the targeting agent, and inactivates the ribosomes which causes protein synthesis inhibition and, ultimately, cell death. Cells that do not have the tag are not affected.

### Anti-6 His-ZAP (Cat. #IT-52)

Specifically eliminates cells expressing your  
**6 His-tagged recombinant proteins on the cell surface.**

### Anti-GFP-ZAP (Cat. #IT-53)

Specifically eliminates your cells demonstrating  
**extracellular expression of green fluorescent protein (GFP).**

### Anti-V5-SAP (Cat. #IT-58)

Specifically eliminates cells expressing your **extracellular V5.**

### Anti-FLAG (M5)-ZAP (Cat. #IT-58)

Specifically eliminates cells expressing your  
**FLAG-tagged recombinant proteins on the cell surface.**

### Control for Tag-Targeted Toxins

**Mouse IgG-SAP (Cat. #IT-18)** is the same molecular weight, consists of similar, comparable materials and is synthesized with the same protocols as the tag-targeted toxins. The difference between targeted toxins and controls is the cell-specific targeting agents are replaced with "blanks," antibodies or peptides that have no specificity, and no ability to target cells. Mouse IgG-SAP is the perfect control molecule to be used with these Tag-Targeted Toxins.



Perhaps Gangsta should wear his safety glasses when he eats cat grass!