

DESCRIPTION

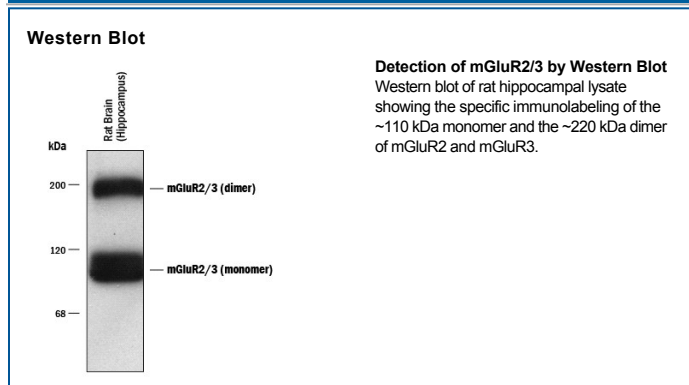
Species Reactivity	Rat
Specificity	Rat ~110 kDa mGluR2 and mGluR3 monomers and ~220 kDa homodimers
Source	Polyclonal Rabbit IgG
Purification	Antigen Affinity-purified
Immunogen	Peptide from the C-terminus region of rat mGluR2 and mGluR3
Formulation	100 µL in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg/mL BSA, and 50% glycerol. See Certificate of Analysis for details.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	1:1000 dilution	See Below

DATA



PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	For long-term storage, ≤ -20° C is recommended. Product is stable at ≤ -20° C for at least 1 year.

BACKGROUND

Rat metabotropic glutamate receptor 2 (mGluR2; also mGlu2) is a 95 kDa, 854 amino acid (aa), 7-transmembrane glycoprotein that belongs to group II of the C-family of G-protein coupled receptors. Group II receptors include mGluR2 and mGluR3. Both are presynaptic, considered to negatively regulate the release of glutamate, associate with Gi/Go proteins, and inhibit adenylate cyclase, thus decreasing cAMP concentration. The effects of mGluR2 and 3 are not always identical. On microglia, mGluR2 but not mGluR3 stimulation induces TNF-α release. mGluR2 is believed to exist as a dimer. Dimerization presumably creates two subunit-linked "open clamshells" which first bind glutamate, then close, and subsequently undergo rearrangement for signal transduction. The cytoplasmic tails of rat mGluR2 and mGluR3 are 64% aa identical; over the last 18 aa, they are 95% aa identical.

References:

1. Rudd, M.T. and J.A. Mccauley (2005) Curr. Top. Med. Chem. 5:869.
2. Gasparini, F. et al. (2002) Curr. Opin. Pharmacol. 2:43.
3. Ferraguti, F. and R. Shigemoto (2006) Cell Tissue Res. 326:483.
4. Shen, K-Z. and S.W. Johnson (2003) J. Physiol. 533:489.
5. Taylor, D.L. et al. (2005) J. Neurosci. 25:2952.