

#### DESCRIPTION

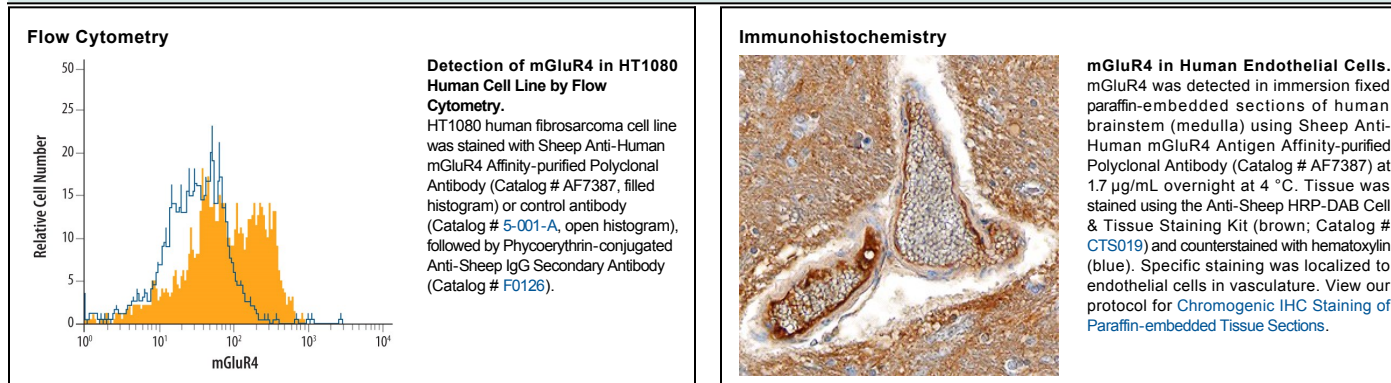
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human mGluR4 in direct ELISAs. In direct ELISAs, approximately 40% cross-reactivity with recombinant human (rh) mGluR7 and rhmGluR8 is observed, and less than 8% cross-reactivity with rhmGluR3 is observed.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Chinese hamster ovary cell line CHO-derived recombinant human mGluR4 Lys33-Ser518 Accession # Q14833
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

#### 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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Flow Cytometry</b>	2.5 µg/10 <sup>6</sup> cells	See Below
<b>Immunohistochemistry</b>	5-15 µg/mL	See Below

#### DATA



#### PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.2 mg/mL.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

#### BACKGROUND

Metabotropic glutamate receptor 4 (mGluR4) is a 95-110 kDa Group III mGluR member of the Class C, GPCR 3 family of proteins. The mGluR family of receptors are 7-transmembrane (TM), non-ion channel glutamate-binding molecules that are linked to adenylylase. mGluR4 is widely expressed, being found on/in multiple cell types, including colonic, breast, urinary and skin epithelium. It is also found on neurons where it is located presynaptically and regulates neurotransmitter release. In general, mGluR4 activation results in a slowing of either glutamine or GABA release. However, in discrete areas, it actually facilitates glutamine release. Mature human mGluR4 is an 880 amino acid (aa) 7-TM molecule (aa 33-912). It contains a 555 aa N-terminal extracellular region (aa 33-587), plus a 65 aa C-terminal cytoplasmic domain. mGluR4 potentially forms homodimers, and is reported to heterodimerize with both mGluR2 and mGluR8. Based on rodent, there is one 68 kDa isoform that is found in taste buds and shows an alternative start site at Met309. Two additional potential splice variants contain a second alternative start site at Met209, and an Asp substitution for aa 343-390, respectively. It is uncertain if human possesses a mGluR4b found in rodent. Over aa 1-518, human mGluR4 shares 96% aa identity with mouse mGluR4.