

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human GPR50. Stains human GPR50 transfectants but not irrelevant transfectants.
Source	Monoclonal Mouse IgG _{2A} Clone # 461129
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	NS0 mouse myeloma cell line transfected with human GPR50 Met1-Val617 Accession # Q13585
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.

*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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
Intracellular Staining by Flow Cytometry	0.25-1 µg/10 ⁶ cells	A172 human glioblastoma cell line fixed with paraformaldehyde and permeabilized with saponin

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. ● 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

GPR50, also known as MTR1L, is a non-glycosylated seven-transmembrane G protein-coupled receptor that is related to the melatonin receptors MT1 and MT2. GPR50 is expressed in the hippocampus, hypothalamus, and pituitary and forms 130 kDa homodimers. It heterodimerizes with either MT1 or MT2, resulting in inhibition of MT1 but not MT2 function. An alternately spliced isoform of GPR50 has a 4 aa deletion in the large C-terminal cytoplasmic domain. The presence of this deletion as well as various polymorphisms have been associated with elevated serum triglyceride and HDL levels. The deletion may also be associated with the development of bipolar disorder. Human GPR50 shares approximately 70% amino acid sequence identity with mouse and rat GPR50.

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