

DESCRIPTION

Species Reactivity	Human
Specificity	Detects Human HTR2A in Direct ELISA. In flow cytometry, it detects Human HTR2A in HEK293 transfected cells but it does not detect parental HEK293 or mock irrelevant transfectants.
Source	Monoclonal Mouse IgG ₁ Clone # 1055217
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Synthetic peptide corresponding to the amino acids 1-75 in the N-term extracellular domain of the Serotonin Receptor 5-HT2A (HTR2A). Accession # P28223
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

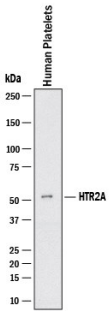
APPLICATIONS

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.

	Recommended Concentration	Sample
Western Blot	2 µg/mL	Human platelets
Flow Cytometry	0.25 µg/mL	HEK293 human embryonic kidney cell line transfected with human 5-HT2A and eGFP
Immunocytochemistry	8-25 µg/mL	Immersion fixed Transfected NSO (positive) and Wild type NSO (negative)

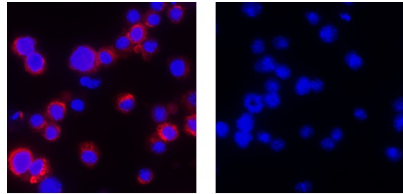
DATA

Western Blot



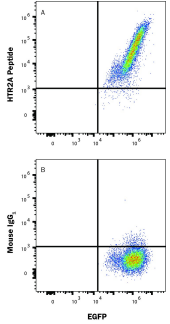
Detection of Human 5-HT Transporter Compounds by Western Blot. Western blot shows lysates of Human platelets. PVDF membrane was probed with 2 µg/mL of Mouse Anti-Human 5-HT Transporter Compounds Monoclonal Antibody (Catalog # MAB11250) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for 5-HT Transporter Compounds at approximately 52 kDa (as indicated). This experiment was conducted under reducing conditions and using Western Blot Buffer Group 1.

Immunocytochemistry



Detection of 5-HT Transporter Compounds in Transfected NSO (positive) and Wild Type NSO (negative). 5-HT Transporter Compounds was detected in immersion fixed transfected NSO (positive) and wild type NSO (negative) using Mouse Anti-Human 5-HT Transporter Compounds Monoclonal Antibody (Catalog # MAB11250) at 8 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for **Fluorescent ICC Staining of Cells on Coverslips**.

Flow Cytometry



Detection of 5-HT2A in HEK293 Human Cell Line Transfected with Human 5-HT2A and eGFP by Flow Cytometry. HEK293 human embryonic kidney cell line transfected with human 5-HT2A and eGFP was stained with (A) Mouse Anti-Human 5-HT2A Monoclonal Antibody (Catalog # MAB11250) or (B) Mouse IgG1 control antibody staining (Catalog # MAB002) followed by Allophycocyanin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0101B). View our protocol for **Staining Membrane-associated Proteins**.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	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
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Human serotonin receptor HTR2A, also known as 5-HT2A or HTR2, is a G-protein coupled receptor (GPCR) for 5-hydroxytryptamine (serotonin). The 5-HT2A receptor is mainly a cell surface receptor with several intracellular locations. Human -5-HT2A is the main excitatory receptor subtype among the GPCRs for serotonin but an inhibitory effect on the visual cortex and the orbitofrontal cortex has also been described. This receptor was first noted for its importance as a target of serotonergic psychedelic drugs such as LSD and psilocybin mushrooms.