

Human Dopamine D5 R/DRD5 Alexa Fluor® 405-conjugated Antibody

Monoclonal Mouse IgG_{2A} Clone # 889022

Catalog Number: FAB82861V

100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects HEK293 human embryonic kidney cell line transfected with human Dopamine D5 R/DRD5 by Flow Cytometry. Does not detect untransfected or irrelevant transfected HEK293 cells.
Source	Monoclonal Mouse IgG _{2A} Clone # 889022
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	NS0 mouse myeloma cell line transfected with human Dopamine D5 R/DRD5 Met1-His477 Accession # P21918
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 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
Flow Cytometry	0.25-1 µg/10 ⁶ cells	HEK293 human embryonic kidney cell line transfected with human Dopamine D5 R/DRD5 and eGFP

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

DRD5, also known as Dopamine D5 Receptor has a higher affinity for neurotransmitter dopamine than DRD1 (1). DRD5 is expressed in neurons in many human brain regions, including cortex regions, hippocampus, choroid plexus, and brainstem (2). Polymorphisms in the DRD5 gene have been associated with Attention Deficit Hyperactivity Disorder (ADHD) (3), schizophrenia (4) and nicotine dependence (5). Dopamine receptors undergo endocytosis upon interaction with receptor agonists and by activation of Protein Kinase C (PKC) (6).

References:

1. Sunahra, R. *et al.* (1991) *Nature*. **350**:614.
2. Weinshank, R. *et al.* (1991) *J Biol Chem*. **266**:22427.
3. Squassina, A. *et al.* (2008) *Neurosci Lett*. Feb 13.
4. Golimbet, V. *et al.* (2008) *Bull Exp Biol Med*. Jan.
5. Wei, J. *et al.* (2012) *Addict Behav*. **37**:622.
6. Thompson, D. *et al.* (2011) *Traffic*. **12**:644.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.