

## DESCRIPTION

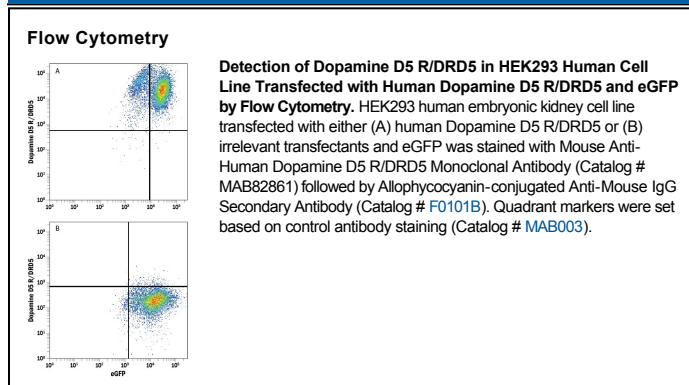
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects HEK293 human embryonic kidney cell line transfected with human Dopamine D5 R/DRD5 by Flow Cytometry. Does not detect untransfected or irrelevant transfected HEK293 cells.
<b>Source</b>	Monoclonal Mouse IgG <sub>2A</sub> Clone # 889022
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	NS0 mouse myeloma cell line transfected with human Dopamine D5 R/DRD5 Met1-His477 Accession # P21918
<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.

	Recommended Concentration	Sample
<b>Flow Cytometry</b>	0.25 µg/10 <sup>6</sup> cells	See Below
<b>CyTOF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<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

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.