



## RayBiotech, Inc.

3607 Parkway Lane suite 200  
Norcross, GA 30092  
Tel: 770-729-2992, 1-888-494-8555  
Fax: 770-206-2393  
Website: [www.raybiotech.com](http://www.raybiotech.com)  
Email: [info@raybiotech.com](mailto:info@raybiotech.com)

### Certificate of Analysis and Data Sheet

## RAT ANTI HUMAN DOPAMINE TRANSPORTER

With HRP-conjugated secondary antibody

**Catalog No.**  
DS-MB-01187

**Species:**  
Human

**Isotype:**  
Rat Ig G2a

### Description

The members of the G protein-coupled receptor family are distinguished by their slow transmitting response to ligand binding. These seven transmembrane proteins include the adrenergic, serotonin and dopamine receptors. The effect of the signaling molecule can be excitatory or inhibitory, depending on the type of receptor to which it binds.  $\beta$ -adrenergic receptor bound to adrenaline activates adenylyl cyclase, while  $\alpha$ 2-adrenergic receptor bound to adrenaline inhibits adenylyl cyclase. The dopamine receptors are divided into two classes, D1 and D2, which differ in their functional characteristics in that D1 receptors stimulate adenylyl cyclase, while D2 receptors inhibit adenylyl cyclase activity. Five different subtypes of dopamine receptor have been described to date. D1DR and D5DR belong to the D1 subclass, while D2DR, D3DR and D4DR belong to the D2 subclass of dopamine receptors. The dopamine transporter, DAT, is a sodium and chloride-dependent dopamine transporter. DAT also can transport dopamine neurotoxins and has been implicated in the selective vulnerability of nigrostriatal dopaminergic neurons in major models of Parkinson's disease.

### Applications

Table Summary of antibody applications and working conditions

Options / Functions	YES	NO	Not determined	Recommended Work dilution or concentration
ELISA			•	
Western Blotting	•			Recognises a broad band at 70-80 kD.
Immunohistology - frozen	•			Use 4% paraformaldehyde*
Immunohistology - paraffin			•	
Immunohistology - resin			•	
Immunoprecipitation			•	
Flow Cytometry			•	
Immunofluorescence staining			•	
Neutralization				

**Note: Other applications are not tested yet. Optimal dilutions should be determined by each laboratory for each application.**

\*Incubate the primary antibody, diluted appropriately in TBS with 1% serum, for 2 hours at RT followed by 16 hours at 4°C. A PAP detection system is recommended when working with rat tissue sections.

**The products are furnished for LABORATORY RESEARCH USE ONLY.  
Not for diagnostic or therapeutic use.**



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### **Preparation**

Immunogen was recombinant protein derived from GST fusion protein. The IgG fraction of tissue culture supernatant was purified by Protein affinity chromatography.

### **Specificity**

Dopamine transporter, N-terminus.

### **Reconstitution**

Supplied as 100  $\mu$ l of purified antibody in liquid form. **Please avoid freeze-thaw cycles.**

### **Secondary Antibody Applications**

<b>Options</b> <b>Functions</b>	<b>YES</b>	<b>NO</b>	<b>Not determined</b>	<b>Recommended Work dilution or concentration</b>
Immunoassay (ELISA, Western blot)	.			1:5000-1:10000

### **Storage**

Store at -20<sup>0</sup>C only. Shipped at 4<sup>0</sup>C and minimize freezing and thawing when use.

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