Anti-DRD1 Antibody [JM10-93]

ET1703-45



Product Type: Species reactivity: Applications: Molecular Wt: Clone number:	Recombinant Rabbit monoclonal IgG, primary antibodies Human, Mouse, Rat WB, IF-Cell, IF-Tissue, IHC-P, IHC-Fr Predicted band size: 49 kDa JM10-93
Description:	The members of the G protein coupled receptor family are distinguished by their slow transmitting response to ligand binding. These 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. β -adrenergic receptor binds to adrenaline activates adenylyl cyclase, while α 2-adrenergic receptor binds 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.
lmmunogen:	Synthetic peptide within C-terminal human DRD1.
Positive control:	Mouse brain tissue lysate, Rat brain tissue lysate, 293T, N2A, SH-SY5Y, mouse brain tissue, rat brain tissue.
Subcellular location:	Cell membrane, Endoplasmic reticulum membrane, Cell projection, cilium membrane, dendrite, dendritic spine.
Database links:	SwissProt: P21728 Human Q61616 Mouse P18901 Rat
Recommended Dilutions: WB IF-Cell IF-Tissue IHC-P IHC-Fr	1:500-1:1,000 1:100-1:500 1:100-1:500 1:50-1:200 1:200-1:500
Storage Buffer:	1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.
Storage Instruction:	Shipped at 4 $^\circ\!\!\mathbb{C}$. Store at +4 $^\circ\!\!\mathbb{C}$ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20 $^\circ\!\!\mathbb{C}$ long term.
Purity:	Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

5 Service mail:support@huabio.cn



Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

ET1703-45 - Page 2

Images



Fig1: Application: IHC-Fr Species: Mouse Site: Striatum Sample: Frozen section Antibody concentration: 1/200 Antigen retrieval: Not required



Fig2: ICC staining of DRD1 in N2A cells (red). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 10% negative goat serum for 15 minutes at room temperature. Cells were probed with the primary antibody (ET1703-45, 1/50) for 1 hour at room temperature, washed with PBS. Alexa Fluor®594 conjugate-Goat anti-Rabbit IgG was used as the secondary antibody at 1/1,000 dilution. The nuclear counter stain is DAPI (blue).



Fig3: ICC staining of DRD1 in SH-SY5Y cells (red). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 10% negative goat serum for 15 minutes at room temperature. Cells were probed with the primary antibody (ET1703-45, 1/50) for 1 hour at room temperature, washed with PBS. Alexa Fluor®594 conjugate-Goat anti-Rabbit IgG was used as the secondary antibody at 1/1,000 dilution. The nuclear counter stain is DAPI (blue).

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn



Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation





Fig4: Immunohistochemical analysis of paraffin-embedded mouse brain tissue using anti-DRD1 antibody. The section was pretreated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes.The tissues were blocked in 1% BSA for 30 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (ET1703-45, 1/50) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Fig5: Immunohistochemical analysis of paraffin-embedded rat brain tissue using anti-DRD1 antibody. The section was pretreated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes.The tissues were blocked in 1% BSA for 30 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (ET1703-45, 1/50) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

- 1. Kajiwara M et al. Urinary Dopamine as a Potential Index of the Transport Activity of Multidrug and Toxin Extrusion in the Kidney. Int J Mol Sci 17:N/A (2016).
- Diaz MR et al. Moderate Alcohol Exposure during the Rat Equivalent to the Third Trimester of Human Pregnancy Alters Regulation of GABAA Receptor-Mediated Synaptic Transmission by Dopamine in the Basolateral Amygdala. Front Pediatr 2:46 (2014).

Hangzhou Huaan Biotechnology Co., Ltd.



Orders:0086-571-88062880

Technical:0086-571-89986345

5 Service mail:support@huabio.cn

Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation