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Drd5 Antibody (N-term).ctrl

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21351a

Product Information

Application	WB, E
Primary Accession	Q8BLD9
Reactivity	Rat, Mouse
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB52770
Calculated MW	53076

Additional Information

Gene ID	13492
Other Names	D(1B) dopamine receptor, D(5) dopamine receptor, Dopamine D5 receptor, Drd5
Target/Specificity	This Drd5 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 19-56 amino acids from the N-terminal region of human Drd5.
Dilution	WB~~1:2000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Drd5 Antibody (N-term).ctrl is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Drd5
Function	G protein-coupled receptor for dopamine, a catecholamine neurotransmitter hormone that functions as the brain's 'reward chemical', driving motivation, reinforcement learning and pleasure (By similarity). Dopamine binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity

	of downstream effectors, such as adenylate cyclase (By similarity). Dopamine receptors can be classified in two categories: (1) DRD5 (together with DRD1) is a D1-type receptor and is coupled to G(s) G proteins, mediating activation of adenylate cyclase activity, while D2-type receptors (DRD2, DRD3 and DRD4) are coupled to G(i)/G(o) G proteins and promote inhibition of adenylate cyclase activity (By similarity). D1- and D2-type dopamine receptors have antagonistic effects, particularly in the brain's striatum, where they govern voluntary movement and reward: D1-type receptors generally stimulate neural activity and promotes action, while D2-type receptors tend to inhibit neural activity and suppress movement (By similarity). DRD5 acts as a key regulator of blood pressure: negatively regulates the renin-angiotensin system (RAS), thereby reducing renal sodium absorption by the kidney (PubMed:12486173, PubMed:21051739).
Cellular Location	Cell membrane {ECO:0000250|UniProtKB:P21918}; Multi-pass membrane protein {ECO:0000250|UniProtKB:P21918}

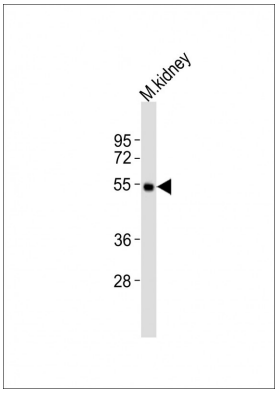
Background

Dopamine receptor whose activity is mediated by G proteins which activate adenylyl cyclase.

References

Carninci P.,et al.Science 309:1559-1563(2005).
Vassilatis D.K.,et al.Proc. Natl. Acad. Sci. U.S.A. 100:4903-4908(2003).
Wilkie T.M.,et al.Genomics 18:175-184(1993).

Images



Anti-Drd5 Antibody (N-term). ctrlat 1:2000 dilution + mouse kidney lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 53 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.