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D3DR Polyclonal Antibody

Catalog # AP73631

Product Information

Application	WB, E
Primary Accession	P35462
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	44195

Additional Information

Gene ID	1814
Other Names	DRD3; D(3) dopamine receptor; Dopamine D3 receptor
Dilution	WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications. E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

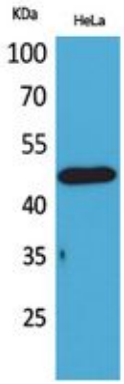
Name	DRD3 (HGNC:3024)
Function	Dopamine receptor that is primarily expressed in limbic areas of the brain and is involved in the modulation of cognitive, emotional, and endocrine functions (PubMed:39984436). Plays a key role in regulating neuronal signaling pathways associated with motivation, reward, and behavior (PubMed:39984436). Coupled to G(i)/G(o) proteins; activation leads to inhibition of adenylate cyclase and decreased intracellular cAMP levels (PubMed:10578130). Involved in the control of locomotor activity and implicated in several neuropsychiatric disorders, including schizophrenia and substance use disorders (PubMed:39984436). Promotes cell proliferation through MAP kinase signaling (PubMed:19520868). Also involved in autophagy regulation: receptor activation stimulates AMPK, which phosphorylates RPTOR and enhances its interaction with MTOR, thereby inhibiting MTORC1 signaling and its downstream target RPS6KB1. This leads to activation of ULK1 and initiation of the autophagy cascade (PubMed:31538542). Forms heterotetramers with DRD1 to potentiate beta-arrestin recruitment and mediate locomotor activity (By similarity).
Cellular Location	Cell membrane; Multi-pass membrane protein. Note=Both membrane-bound

	and scattered in the cytoplasm during basal conditions Receptor stimulation results in the rapid internalization and sequestration of the receptors at the perinuclear area (5 and 15 minutes), followed by the dispersal of the receptors to the membrane (30 minutes). DRD3 and GRK4 co-localize in lipid rafts of renal proximal tubule cells
Tissue Location	Brain.

Background

Dopamine receptor whose activity is mediated by G proteins which inhibit adenylyl cyclase. Promotes cell proliferation.

Images



Western Blot analysis of HeLa cells using D3DR Polyclonal Antibody.. Secondary antibody was diluted at 1:20000

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