

# Anti-DRD3 / Dopamine Receptor D3 Antibody

Rabbit Anti Human Polyclonal Antibody  
Catalog # ALS18582

## Product Information

---

<b>Application</b>	WB, IHC-P, IF
<b>Primary Accession</b>	<a href="#">P35462</a>
<b>Predicted</b>	Human, Mouse, Rat
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG
<b>Calculated MW</b>	44195

## Additional Information

---

<b>Gene ID</b>	1814
<b>Alias Symbol</b> <b>Other Names</b>	DRD3 DRD3, D3 dopamine receptor, D3DR, Dopamine 3 receptor, Dopamine receptor D3, D3nf, Essential tremor 1, ETM1, FET1, D(3) dopamine receptor, Dopamine D3 receptor
<b>Target/Specificity</b>	Human DRD3 / Dopamine Receptor D3
<b>Reconstitution &amp; Storage</b>	Affinity purified
<b>Precautions</b>	Anti-DRD3 / Dopamine Receptor D3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

---

<b>Name</b>	DRD3 ( <a href="#">HGNC:3024</a> )
<b>Function</b>	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: <a href="#">39984436</a> ). Plays a key role in regulating neuronal signaling pathways associated with motivation, reward, and behavior (PubMed: <a href="#">39984436</a> ). Coupled to G(i)/G(o) proteins; activation leads to inhibition of adenylate cyclase and decreased intracellular cAMP levels (PubMed: <a href="#">10578130</a> ). Involved in the control of locomotor activity and implicated in several neuropsychiatric disorders, including schizophrenia and substance use disorders (PubMed: <a href="#">39984436</a> ). Promotes cell proliferation through MAP kinase signaling (PubMed: <a href="#">19520868</a> ). 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.

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