

## D2DR (N-19): sc-7522

### BACKGROUND

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.  $\beta$ -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.

### CHROMOSOMAL LOCATION

Genetic locus: DRD2 (human) mapping to 11q23.1; Drd2 (mouse) mapping to 9 A5.3.

### SOURCE

D2DR (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of D2DR of human origin.

### PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-7522 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

D2DR (N-19) is recommended for detection of D2DR long and short forms of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

D2DR (N-19) is also recommended for detection of D2DR long and short forms in additional species, including equine, canine and porcine.

Suitable for use as control antibody for D2DR siRNA (h): sc-35161, D2DR siRNA (m): sc-35162, D2DR shRNA Plasmid (h): sc-35161-SH, D2DR shRNA Plasmid (m): sc-35162-SH, D2DR shRNA (h) Lentiviral Particles: sc-35161-V and D2DR shRNA (m) Lentiviral Particles: sc-35162-V.

Molecular Weight of D2DR: 48/51 kDa.

Positive Controls: SK-N-SH cell lysate: sc-2410, mouse brain extract: sc-2253 or rat brain extract: sc-2392.

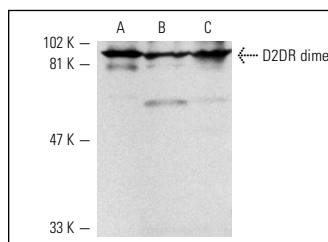
### STORAGE

Store at 4°C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

### RESEARCH USE

For research use only, not for use in diagnostic procedures.

### DATA



D2DR (N-19): sc-7522. Western blot analysis of dopamine receptor D2 dimer expression in H4 whole cell lysate (A) and rat brain (B) and mouse brain (C) tissue extracts.

### SELECT PRODUCT CITATIONS

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