**BACKGROUND**

DSDR (dopamine receptor D5, DR1B, DRD1L2) is a G protein-coupled receptor of the D1-like family that stimulates adenylyl cyclase and has a 10-fold higher affinity for dopamine than the D1 subtype. D5DR is present in neurons in the limbic regions of the brain. D5DR mRNA is most abundant in discrete cortical areas (layers II, IV and VI), the dentate gyrus and hippocampal subfields with low levels in the striatum. There are five major types of dopamine receptors. All are G protein-coupled metabotropic receptors, and can be excitatory or inhibitory to the post-synaptic neuron. D1 (D1A, D1C, D1D) and D5 (D1B) receptors belong to the D1-like receptor family. The D2, D3 and D4 receptors belong to the D2-like receptor family. Activation of the D1-like family receptors couples to increases in cAMP and is typically excitatory, while D2-like activation reduces cAMP and is typically inhibitory. Significant age-related decline in dopamine receptor mRNAs occurs in the hippocampus and entorhinal cortex.

**REFERENCES**


**CHROMOSOMAL LOCATION**


**SOURCE**

DSDR (E-12) is a mouse monoclonal antibody raised against amino acids 371-477 of D5DR of human origin.

**PRODUCT**

Each vial contains 200 µg IgG κ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

DSDR (E-12) is available conjugated to agarose (sc-376088 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376088 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376088 PE), fluorescein (sc-376088 FITC), Alexa Fluor® 488 (sc-376088 AF488), Alexa Fluor® 546 (sc-376088 AF546), Alexa Fluor® 594 (sc-376088 AF594) or Alexa Fluor® 647 (sc-376088 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376088 AF680) or Alexa Fluor® 790 (sc-376088 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**APPLICATIONS**

DSDR (E-12) is recommended for detection of D5DR of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

**DATA**

DSDR (E-12): sc-376088. Western blot analysis of D5DR expression in human ovary tissue extract. (Image 352x232 to 369x289)

**SELECT PRODUCT CITATIONS**


**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.