SANTA CRUZ BIOTECHNOLOGY, INC.

Dopamine (5E588): sc-70986

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Dopamine ($C_6H_3(OH)_2$-CH_2-CH_2-NH_2) is a catecholamine neurotransmitter expressed manuly in the brain that activates dopamine receptors. Dopamine is also a neurohormone released by the hypothalamus. Its chemical name is 4-(2-aminoethyl)benzene-1,2-diol and its main function is to inhibit the release of prolactin from the anterior lobe of the pituitary. Dopamine can be used as a sympathomimetic drug because it produces effects such as increased heart rate and blood pressure. Changes in Dopamine concentration within the brain may explain symptoms observed in individuals with Schizophrenia, and a reduction in its concentration is associated with Parkinson's disease.

REFERENCES

1. Meltzer, H.Y. and Stahl, S.M. 1976. The dopamine hypothesis of Schizophrenia: a review. Schizophr. Bull. 2: 19-76.
2. Kebabian, J.W. and Calne, D.B. 1979. Multiple receptors for dopamine. Nature 277: 93-96.
3. Horn, A.S. 1990. Dopamine uptake: a review of progress in the last decade. Prog. Neurobiol. 34: 387-400.
4. Kalivas, P.W. and Stewart, J. 1992. Dopamine transmission in the initiation and expression of drug- and stress-sensitization of motor activity. Brain Res. Brain Res. Rev. 16: 223-244.
5. Seeman, P. and Van Tol, H.H. 1994. Dopamine receptor pharmacology. Trends Pharmacol. Sci. 15: 264-270.
6. Laruelle, M. 1998. Imaging dopamine transmission in Schizophrenia. A review and meta-analysis. Q. J. Nucl. Med. 42: 211-221.

SOURCE

Dopamine (5E588) is a mouse monoclonal antibody raised against dopamine conjugated wtih BSA.

PRODUCT

Each vial contains 100 µg IgG_1 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Dopamine (5E588) is recommended for detection of catecholamine of mouse, rat and human origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

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.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.