

HTR3D (K-13): sc-102604

BACKGROUND

Serotonin is a monoamine neurotransmitter that is made in serotonergic neurons in the CNS (central nervous system) and is important in the regulation of mood, sleep, vomiting, sexuality and appetite. 5-HT₃ (5-hydroxytryptamine-3) receptor is the only ligand-gated ion channel within the family of serotonin receptors. It is composed of five subunits consisting of SR-3A, SR-3B, HTR3C, HTR3D and HTR3E. HTR3D (5-hydroxytryptamine receptor 3D), also known as Serotonin receptor 3D, is a 454 amino acid multi-pass membrane protein that is one component of the pentaheteromeric complex that forms the 5-HT₃ receptor. HTR3D must be co-expressed with SR-3A to form a functional 5-HT₃ receptor complex on the plasma membrane. Until it is complexed with SR-3A, HTR3D is localized within the endoplasmic reticulum. Expression of HTR3D is restricted to kidney, colon and liver. There are three different isoforms of HTR3D that are expressed as a result of alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: HTR3D/HTR3E (human) mapping to 3q27.1.

SOURCE

HTR3D (K-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of HTR3D of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-102604 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

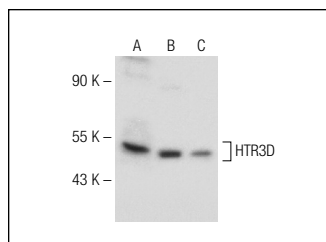
APPLICATIONS

HTR3D (K-13) is recommended for detection of HTR3D and HTR3E of human origin by Western Blotting (starting dilution 1:200, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with HTR3C.

Molecular Weight of HTR3D: 50 kDa.

Positive Controls: COLO 320DM cell lysate: sc-2226, HCT-116 whole cell lysate: sc-364175 or SW480 cell lysate: sc-2219 .

DATA



HTR3D (K-13): sc-102604. Western blot analysis of HTR3D expression in SW480 (A), COLO 320DM (B) and HCT 116 (C) whole cell lysates.

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 or our catalog for detailed protocols and support products.

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Try **HTR3D (G-5): sc-515279**, our highly recommended monoclonal alternative to HTR3D (K-13).