

KAT III (H-64): sc-67379

BACKGROUND

Kynurenine aminotransferases belong to the class-I pyridoxal-phosphate-dependent aminotransferase family and contain the members KAT I, KAT II, and KAT III. KAT III is widely expressed but is seen in higher abundance in liver, heart, kidney and neuroendocrine tissues. KAT III functions in the transamination of kynurenine to form kynurenic acid, a neuroprotective and anticonvulsant metabolite of tryptophan. Kynurenic acid is involved in synaptic transmission and has been implicated in a number of neurological disorders including schizophrenia and Huntington's disease.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CCBL2 (human) mapping to 1p36.33; Ccbl2 (mouse) mapping to 3 H1.

SOURCE

KAT III (H-64) is a rabbit polyclonal antibody raised against amino acids 1-64 mapping at the N-terminus of KAT III of human origin.

RESEARCH USE

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

PRODUCT

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

APPLICATIONS

KAT III (H-64) is recommended for detection of KAT III isoforms 1 and 2 of human and, to a lesser extent, mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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).

KAT III (H-64) is also recommended for detection of KAT III isoforms 1 and 2 in additional species, including canine.

Suitable for use as control antibody for KAT III siRNA (h): sc-105589, KAT III siRNA (m): sc-77397, KAT III shRNA Plasmid (h): sc-105589-SH, KAT III shRNA Plasmid (m): sc-77397-SH, KAT III shRNA (h) Lentiviral Particles: sc-105589-V and KAT III shRNA (m) Lentiviral Particles: sc-77397-V.

Molecular Weight (predicted) of KAT III: 51 kDa.

Molecular Weight (observed) of KAT III: 43 kDa.

Positive Controls: NTERA-2 cl.D1 whole cell lysate: sc-364181.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

STORAGE

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

PROTOCOLS

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



Try **KAT III (A-7): sc-365219** or **KAT III (A-9): sc-166922**, our highly recommended monoclonal alternatives to KAT III (H-64).