

Che-1 (H-115): sc-292611

BACKGROUND

Che-1, also known as apoptosis-antagonizing transcription factor (AATF), is a widely expressed nuclear protein that belongs to the AATF family. Hyperphosphorylated during the G₁/S phase transition, Che-1 may function as a general inhibitor of the histone deacetylase HDAC1. Che-1 binding to the pocket region of Rb may displace HDAC1 from Rb/E2F complexes, leading to activation of E2F target genes and cell cycle progression. Displacement of HDAC1 from Sp1 bound to the p21 promoter leads to increased expression of Che-1. It also antagonizes PAR4 (prostate apoptosis response 4) mediated induction of aberrant amyloid peptide production in Alzheimer's disease (AD), also known as presenile and senile dementia. PAR4 is a leucine zipper protein that is proapoptotic and associated with neuronal degeneration in AD. Che-1 interaction with PAR4 suggests that it might directly or indirectly participate in regulation of PAR4 activity. Che-1 also co-localizes with PAR4 in both cytoplasmic and nuclear compartments, and interacts directly and selectively with PAR4 via the leucine zipper domain in neural cells.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: AATF (human) mapping to 17q12; Aatf (mouse) mapping to 11 C.

SOURCE

Che-1 (H-115) is a rabbit polyclonal antibody raised against amino acids 437-551 mapping near the C-terminus of Che-1 of human origin.

PRODUCT

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

APPLICATIONS

Che-1 (H-115) is recommended for detection of Che-1 of mouse, rat and human 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).

Che-1 (H-115) is also recommended for detection of Che-1 in additional species, including bovine, porcine and avian.

Suitable for use as control antibody for Che-1 siRNA (h): sc-72888, Che-1 siRNA (m): sc-72889, Che-1 shRNA Plasmid (h): sc-72888-SH, Che-1 shRNA Plasmid (m): sc-72889-SH, Che-1 shRNA (h) Lentiviral Particles: sc-72888-V and Che-1 shRNA (m) Lentiviral Particles: sc-72889-V.

Molecular Weight of Che-1: 63 kDa.

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.

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.