

# Che-1 (K-16): sc-70033

## BACKGROUND

Che-1 (protein AATF, apoptosis-antagonizing transcription factor) is a widely expressed nuclear protein that belongs to the AATF family. Hyperphosphorylated during the G<sub>1</sub>/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 disease (AD; presenile and senile dementia). PAR4 is a leucine zipper protein that is pro-apoptotic 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 it 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 (K-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Che-1 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-70033 X, 200  $\mu$ g/0.1 ml.

Blocking peptide available for competition studies, sc-70033 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Che-1 (K-16) 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), 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 (K-16) is also recommended for detection of Che-1 in additional species, including equine, canine, 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.

Che-1 (K-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Che-1: 63 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (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.


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Try **Che-1 (AATF2B6): sc-81225**, our highly recommended monoclonal alternative to Che-1 (K-16).