SANTA CRUZ BIOTECHNOLOGY, INC.

ASC-1 (D-4): sc-365611



BACKGROUND

Activating signal co-integrator-1 (ASC-1), originally identified as TRIP4, is a transcriptional co-activator of nuclear receptors that associates with specific components of the RNA polymerase II complex and binds the basal transcription factors TBP and TFIIA. ASC-1 functions with the transcription integrators SRC-1 and CBP/p300 through its zinc finger motif and is dependent on their ligand-dependent transactivation domain, AF2. Endogenous ASC-1 in HeLa cells is predominantly a nuclear protein. Under conditions of serum starvation, ASC-1 localizes to the cytoplasm. However, when serum starved in the presence of ligand of coexpressed CBP or SRC-1, ASC-1 remains in the nucleus. This behavior of ASC-1 suggests that it may play an important role in establishing distinct co-activator complexes under different cellular conditions.

CHROMOSOMAL LOCATION

Genetic locus: TRIP4 (human) mapping to 15q22.31, Trip4 (mouse) mapping to 9 C.

SOURCE

ASC-1 (D-4) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 1-27 near the N-terminus of ASC-1 of human origin.

PRODUCT

Each vial contains 200 μ g lgG₁ kappa light chain 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-365611 X, 200 μ g/0.1 ml.

Blocking peptide available for competition studies, sc-365611 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

RESEARCH USE

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

APPLICATIONS

ASC-1 (D-4) is recommended for detection of ASC-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for ASC-1 siRNA (h): sc-39159, ASC-1 siRNA (m): sc-38808, ASC-1 shRNA Plasmid (h): sc-39159-SH, ASC-1 shRNA Plasmid (m): sc-38808-SH, ASC-1 shRNA (h) Lentiviral Particles: sc-39159-V and ASC-1 shRNA (m) Lentiviral Particles: sc-38808-V.

ASC-1 (D-4) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of ASC-1: 68 kDa.

Positive Controls: NRK whole cell lysate: sc-36419, K-562 whole cell lysate: sc-2203 or PC-12 cell lysate: sc-2250.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG K BP-HRP: sc-516102 or m-IgG K BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgG K BP-FITC: sc-516140 or m-IgG K BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA





ASC-1 (D-4): sc-365611. Western blot analysis of ASC-1 expression in K-562 (**A**), HEL 92.1.7 (**B**), SJRH30 (**C**) and PC-12 (**D**) whole cell lysates. ASC-1 (D-4): sc-365611. Western blot analysis of ASC-1 expression in NRK whole cell lysate.

SELECT PRODUCT CITATIONS

- Zilu, S., et al. 2019. Effects of XIAP on high fat diet-induced hepatic steatosis: a mechanism involving NLRP3 inflammasome and oxidative stress. Aging 11: 12177-12201.
- Ge, C., et al. 2019. Fisetin supplementation prevents high fat diet-induced diabetic nephropathy by repressing Insulin resistance and RIP3-regulated inflammation. Food Funct. 10: 2970-2985.
- Hur, J., et al. 2021. Glucagon-like peptide 1 receptor (GLP-1R) agonist relieved asthmatic airway inflammation via suppression of NLRP3 inflammasome activation in obese asthma mice model. Pulm. Pharmacol. Ther. 67: 102003.
- Chen, B., et al. 2022. The neuroprotective mechanism of lithium after ischaemic stroke. Commun. Biol. 5: 105.
- Zhang, M., et al. 2022. Ageing related thyroid deficiency increases braintargeted transport of liver-derived ApoE4-laden exosomes leading to cognitive impairment. Cell Death Dis. 13: 406.

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 for detailed protocols and support products.