

ASC-1 (F-7): sc-376916

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.

REFERENCES

- Lee, J.W., et al. 1995. Two classes of proteins dependent on either the presence or absence of thyroid hormone for interaction with the thyroid hormone receptor. *Mol. Endocrinol.* 9: 243-254.
- Mangelsdorf, D.J., et al. 1995. The nuclear receptor superfamily: the second decade. *Cell* 83: 835-839.

CHROMOSOMAL LOCATION

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

SOURCE

ASC-1 (F-7) is a mouse monoclonal antibody raised against amino acids 282-581 mapping at the C-terminus of ASC-1 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ 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-376916 X, 200 µg/0.1 ml.

APPLICATIONS

ASC-1 (F-7) 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 (F-7) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

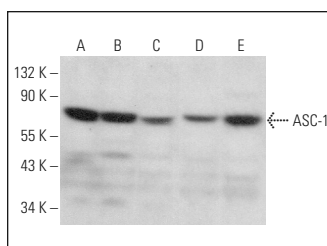
Molecular Weight of ASC-1: 68 kDa.

Positive Controls: ASC-1 (m): 293T Lysate: sc-118583, HEL 92.1.7 cell lysate: sc-2270 or K-562 whole cell lysate: sc-2203.

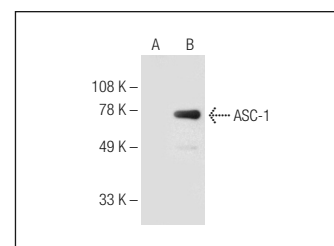
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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-IgGκ BP-FITC: sc-516140 or m-IgGκ 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 (F-7): sc-376916. Western blot analysis of ASC-1 expression in K-562 (A), HEL 92.1.7 (B), NAMALWA (C), WEHI-231 (D) and WI-38 (E) whole cell lysates.



ASC-1 (F-7): sc-376916. Western blot analysis of ASC-1 expression in non-transfected: sc-117752 (A) and mouse ASC-1 transfected: sc-118583 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Wu, X., et al. 2018. NLRP3 inflammasome mediates chronic intermittent hypoxia-induced renal injury implication of the microRNA-155/FOXO3a signaling pathway. *J. Cell. Physiol.* 233: 9404-9415.
- Lopes de Oliveira, G.A., et al. 2019. Preventive effect of bergenin against the development of TNBS-induced acute colitis in rats is associated with inflammatory mediators inhibition and NLRP3/ASC inflammasome signaling pathways. *Chem. Biol. Interact.* 297: 25-33.
- Huang, X., et al. 2019. VSIG4 mediates transcriptional inhibition of Nlrp3 and Il-1β in macrophages. *Sci. Adv.* 5: eaau7426.
- Cui, S., et al. 2020. CD1d1 intrinsic signaling in macrophages controls NLRP3 inflammasome expression during inflammation. *Sci. Adv.* 6: eaaz7290.
- Zhao, J., et al. 2021. Bruton's tyrosine kinase regulates macrophage-induced inflammation in the diabetic kidney via NLRP3 inflammasome activation. *Int. J. Mol. Med.* 48: 177.

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.