

# ASCL1 (C-15): sc-48449

## BACKGROUND

The mammalian homolog of the *Drosophila* protein achaete-scute, ASCL1 (also known as ASH1) is a basic helix-loop-helix transcription factor that is required for early development of the nervous system. Expressed in fetal brain, ASCL1 is essential for the proper development of autonomic neurons and for the survival of subsets of autonomic neurons. ASCL1 interaction with MEF2A may regulate the expression of specific genes that are critical for the formation of distinct neuronal circuits within the central nervous system. The high level of ASCL1 expression in neuroendocrine tumors, such as medullary thyroid cancer, small cell lung cancer and lung cancer with neuroendocrine features may provide a useful marker for cancers with neuroendocrine features. Mapping to human chromosome 12, the ASCL1 gene contains a trinucleotide repeat region, making this locus a candidate for inherited disease.

## CHROMOSOMAL LOCATION

Genetic locus: ASCL1 (human) mapping to 12q23.2; Ascl1 (mouse) mapping to 10 C1.

## SOURCE

ASCL1 (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ASCL1 of human origin.

## PRODUCT

Each vial contains 200 µg 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-48449 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-48449 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ASCL1 (C-15) is recommended for detection of ASCL1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

ASCL1 (C-15) is also recommended for detection of ASCL1 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for ASCL1 siRNA (h): sc-37692, ASCL1 siRNA (m): sc-37693, ASCL1 shRNA Plasmid (h): sc-37692-SH, ASCL1 shRNA Plasmid (m): sc-37693-SH, ASCL1 shRNA (h) Lentiviral Particles: sc-37692-V and ASCL1 shRNA (m) Lentiviral Particles: sc-37693-V.

ASCL1 (C-15) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

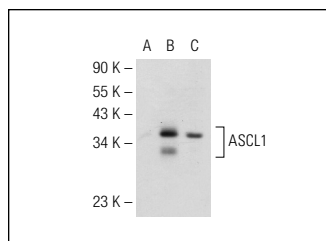
Molecular Weight of ASCL1: 35 kDa.

Positive Controls: ASCL1 (h): 293T Lysate: sc-171675, C32 whole cell lysate: sc-2205 or RAT2 whole cell lysate: sc-364198.

## 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

## DATA



ASCL1 (C-15): sc-48449. Western blot analysis of ASCL1 expression in non-transfected 293T: sc-117752 (A), human ASCL1 transfected 293T: sc-171675 (B) and C32 (C) whole cell lysates.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

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Satisfaction  
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Try **ASCL1 (G-7): sc-390794** or **ASCL1 (G-9): sc-374550**, our highly recommended monoclonal alternatives to ASCL1 (C-15).