

ASXL1 (G-20): sc-85282

BACKGROUND

ASXL1 (additional sex combs-like protein 1) is a 1,541 amino acid protein encoded by the human gene ASXL1. ASXL1 belongs to the Asx family and contains one PHD-type zinc finger. It also contains one Leu-Xaa-Xaa-Leu-Leu (LXXLL) motif, which may be required for an association with nuclear receptors. ASXL1 is believed to be a Polycomb group (PcG) protein. PcG proteins act by forming multiprotein complexes, which are required to maintain the transcriptionally repressive state of homeotic genes throughout development. PcG proteins are not required to initiate repression, but to maintain it during later stages of development. They probably act via methylation of histones, rendering chromatin heritably changed in its expressibility. ASXL1 is a widely expressed nuclear protein with highest expression found in testis.

REFERENCES

1. Fisher, C.L., Berger, J., Randazzo, F. and Brock, H.W. 2003. A human homolog of additional sex combs, additional sex combs-like 1, maps to chromosome 20q11. *Gene* 306: 115-126.
2. Katoh, M. and Katoh, M. 2003. Identification and characterization of ASXL2 gene in silico. *Int. J. Oncol.* 23: 845-850.
3. Katoh, M. and Katoh, M. 2004. Identification and characterization of ASXL3 gene in silico. *Int. J. Oncol.* 24: 1617-1622.
4. Katoh, M. and Katoh, M. 2004. Identification and characterization of human CXXC10 gene in silico. *Int. J. Oncol.* 25: 1193-1199.
5. Fisher, C.L., Randazzo, F., Humphries, R.K. and Brock, H.W. 2006. Characterization of ASXL1, a murine homolog of additional sex combs, and analysis of the ASX-like gene family. *Gene* 369: 109-118.
6. Cho, Y.S., Kim, E.J., Park, U.H., Sin, H.S. and Um, S.J. 2006. Additional sex comb-like 1 (ASXL1), in cooperation with SRC-1, acts as a ligand-dependent coactivator for retinoic acid receptor. *J. Biol. Chem.* 281: 17588-17598.

CHROMOSOMAL LOCATION

Genetic locus: ASXL1 (human) mapping to 20q11.21; Asxl1 (mouse) mapping to 2 H1.

SOURCE

ASXL1 (G-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of ASXL1 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-85282 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

ASXL1 (G-20) is recommended for detection of ASXL1 of mouse 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).

ASXL1 (G-20) is also recommended for detection of ASXL1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for ASXL1 siRNA (h): sc-72572, ASXL1 siRNA (m): sc-141310, ASXL1 shRNA Plasmid (h): sc-72572-SH, ASXL1 shRNA Plasmid (m): sc-141310-SH, ASXL1 shRNA (h) Lentiviral Particles: sc-72572-V and ASXL1 shRNA (m) Lentiviral Particles: sc-141310-V.

Molecular Weight of ASXL1: 166 kDa.

Positive Controls: mouse brain extract: sc-2253 or mouse testis extract: sc-2405.

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) 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.

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.



Try **ASXL1 (6E2): sc-293204**, our highly recommended monoclonal alternative to ASXL1 (G-20).