

ALX1 (G-14): sc-161338

BACKGROUND

ALX homeobox proteins are members of the paired homeobox family, which play a role in regulating cell development and pattern formation during embryonic stages. ALX1 (ALX homeobox protein 1), also known as CART-1 (cartilage homeoprotein-1), is a 326 amino acid protein specific to cervix and cartilage tissues. As well as having a homeobox domain, ALX1 also contains an OAR domain, which has been suggested to be important for DNA binding or protein-protein interactions and transactivation. First characterized from a rat chondrosarcoma tumor cell line, ALX1 is a homeobox transcription factor that regulates downstream target genes and has specifically shown to act as a transcriptional repressor for rat prolactin *in vivo*. Homozygous ALX1 deficient mice are born with acrania and meroanencephaly, suggesting ALX1 function in the development of the neural tube. It has also been suggested that ALX1 cooperates with ALX4 in limb development and craniofacial bone formation.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ALX1 (human) mapping to 12q21.31; Alx1 (mouse) mapping to 10 D1.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-161338 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

SOURCE

ALX1 (G-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ALX1 of human origin.

APPLICATIONS

ALX1 (G-14) is recommended for detection of ALX1 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); non cross-reactive with ALX3 or ALX4.

ALX1 (G-14) is also recommended for detection of ALX1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for ALX1 siRNA (h): sc-96179, ALX1 siRNA (m): sc-141035, ALX1 shRNA Plasmid (h): sc-96179-SH, ALX1 shRNA Plasmid (m): sc-141035-SH, ALX1 shRNA (h) Lentiviral Particles: sc-96179-V and ALX1 shRNA (m) Lentiviral Particles: sc-141035-V.

Molecular Weight of ALX1: 37 kDa.

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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.