

Fox-1 (N-14): sc-135476

BACKGROUND

Fox-1, also known as A2BP, A2BP1 or HRNBP1, is a 397 amino acid protein that localizes to both the nucleus and the cytoplasm and contains one RRM domain. Expressed predominately in muscle and brain tissue, Fox-1 interacts with Ataxin-2 and functions as an RNA-binding protein that regulates alternative splicing events during erythropoiesis, specifically by binding to 5'-UGCAUGU-3' DNA elements. Multiple isoforms of Fox-1 exist due to alternative splicing events. The gene encoding Fox-1 maps to human chromosome 16p13.3, which encodes over 900 genes and comprises nearly 3% of the human genome. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. The rare disorder Rubinstein-Taybi syndrome is also associated with chromosome 16, as is Crohn's disease, which is a gastrointestinal inflammatory condition.

REFERENCES CHROMOSOMAL LOCATION

Genetic locus: A2BP1 (human) mapping to 16p13.3; A2bp1 (mouse) mapping to 16 A1.

SOURCE

Fox-1 (N-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of Fox-1 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-135476 P, (100 µg peptide >in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA)

RESEARCH USE

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

APPLICATIONS

Fox-1 (N-14) is recommended for detection of Fox-1 isoforms 1-5 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Fox-1 (N-14) is also recommended for detection of Fox-1 isoforms 1-5 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for Fox-1 siRNA (h): sc-93015, Fox-1 siRNA (m): sc-145218, Fox-1 shRNA Plasmid (h): sc-93015-SH, Fox-1 shRNA Plasmid (m): sc-145218-SH, Fox-1 shRNA (h) Lentiviral Particles: sc-93015-V and Fox-1 shRNA (m) Lentiviral Particles: sc-145218-V.

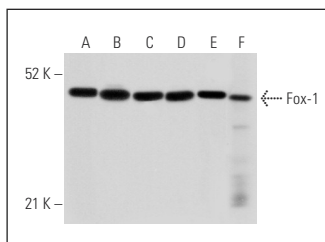
Molecular Weight of Fox-1: 43 kDa.

Positive Controls: L6 whole cell lysate: sc-364196, Hep G2 cell lysate: sc-2227 or Sol8 cell lysate: sc-2249.

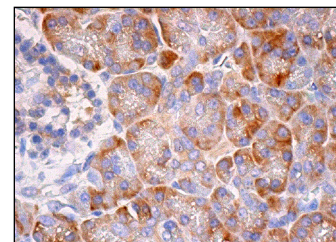
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



Fox-1 (N-14): sc-135476. Western blot analysis of Fox-1 expression in L6 (A), Hep G2 (B), Sol8 (C) and Neuro-2A (D) whole cell lysates and mouse testis (E) and mouse heart (F) tissue extracts.



Fox-1 (N-14): sc-135476. Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

- Hammock, E.A. and Levitt, P. 2011. Developmental expression mapping of a gene implicated in multiple neurodevelopmental disorders, A2bp1 (Fox1). *Dev. Neurosci.* 33: 64-74.
- Sengupta, N., et al. 2013. Analysis of colorectal cancers in British Bangladeshi identifies early onset, frequent mucinous histotype and a high prevalence of RBFox1 deletion. *Mol. Cancer* 12: 1.

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 or our catalog for detailed protocols and support products.



Try **Fox-1 (A-12): sc-515244**, our highly recommended monoclonal alternative to Fox-1 (N-14).