

OBFC1 (H-300): sc-135364

BACKGROUND

The oligonucleotide/oligosaccharide-binding (OB) domain is a dense structural motif normally used for nucleic acid recognition. Proteins containing an OB motif are structurally characterized by a small beta-barrel fold formed from several strands connected by modulating loops that recognize either single-stranded or unusually structured nucleic acids. The OB-fold core is extremely variable in length and in functional detail, and members of the OB-fold domain family have a low degree of sequence similarity. However, certain features of ligand binding are conserved among OB-fold complexes. OB-fold proteins are critical for DNA replication, DNA recombination, DNA repair, transcription, translation, cold shock response and telomere maintenance. OBFC1 (oligonucleotide/oligosaccharide-binding fold containing 1) is a 368 amino acid protein that may bind nucleic acids or oligosaccharides. Two isoforms of OBFC1 may exist due to alternative splicing.

REFERENCES

1. Murzin, A.G. 1993. OB(oligonucleotide/oligosaccharide binding)-fold: common structural and functional solution for non-homologous sequences. *EMBO J.* 12: 861-867.
2. Agrawal, V. and Kishan, R.K. 2001. Functional evolution of two subtly different (similar) folds. *BMC Struct. Biol.* 1: 5.

CHROMOSOMAL LOCATION

Genetic locus: OBFC1 (human) mapping to 10q24.33.

SOURCE

OBFC1 (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-terminus of OBFC1 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.

APPLICATIONS

OBFC1 (H-300) is recommended for detection of OBFC1 of 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); non cross-reactive with OBFC2A or OBFC2B.

OBFC1 (H-300) is also recommended for detection of OBFC1 in additional species, including equine and porcine.

Suitable for use as control antibody for OBFC1 siRNA (h): sc-90707, OBFC1 shRNA Plasmid (h): sc-90707-SH and OBFC1 shRNA (h) Lentiviral Particles: sc-90707-V.

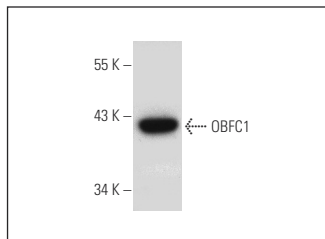
Molecular Weight of OBFC1: 42 kDa.

Positive Controls: A549 cell lysate: sc-2413 or Jurkat whole cell lysate: sc-2204.

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.

DATA



OBFC1 (H-300): sc-135364. Western blot analysis of OBFC1 expression in A549 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Huang, C., Dai, X. and Chai, W. 2012. Human Stn1 protects telomere integrity by promoting efficient lagging-strand synthesis at telomeres and mediating C-strand fill-in. *Cell Res.* 22: 1681-1695.

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.



Try **OBFC1 (E-10): sc-376450** or **OBFC1 (A-6): sc-374178**, our highly recommended monoclonal alternatives to OBFC1 (H-300).