

# OAF (E-12): sc-138491

## BACKGROUND

OAF (out at first protein homolog), also known as NS5ATP13TP2 (HCV NS5A-transactivated protein 13 target protein 2), is a 273 amino acid protein belonging to the OAF family. The gene encoding OAF maps to human chromosome 11q23.3 and mouse chromosome 9 A5.1. With approximately 135 million base pairs and 1,400 genes, chromosome 11 makes up around 4% of human genomic DNA and is considered a gene and disease association dense chromosome. The chromosome 11 encoded Atm gene is important for regulation of cell cycle arrest and apoptosis following double strand DNA breaks. Atm mutation leads to the disorder known as ataxia-telangiectasia. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are also associated with defects in chromosome 11.

## REFERENCES

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3. Schuchman, E.H. 2007. The pathogenesis and treatment of acid sphingomyelinase-deficient Niemann-Pick disease. *J. Inherit. Metab. Dis.* 30: 654-663.
4. Siem, G., et al. 2008. Jervell and Lange-Nielsen syndrome in Norwegian children: aspects around cochlear implantation, hearing, and balance. *Ear Hear.* 29: 261-269.
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6. Ul-Hassan, A., et al. 2009. Common genetic changes in leiomyosarcoma and gastrointestinal stromal tumour: implication for ataxia telangiectasia mutated involvement. *Int. J. Exp. Pathol.* 90: 549-557.
7. Coldren, C.D., et al. 2009. Chromosomal microarray mapping suggests a role for BSX and Neurogranin in neurocognitive and behavioral defects in the 11q terminal deletion disorder (Jacobsen syndrome). *Neurogenetics* 10: 89-95.

## CHROMOSOMAL LOCATION

Genetic locus: OAF (human) mapping to 11q23.3; Oaf (mouse) mapping to 9 A5.1.

## SOURCE

OAF (E-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of OAF of human origin.

## STORAGE

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

## 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-138491 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

OAF (E-12) is recommended for detection of OAF of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

OAF (E-12) is also recommended for detection of OAF in additional species, including equine, canine, porcine and avian.

Suitable for use as control antibody for OAF siRNA (h): sc-96787, OAF siRNA (m): sc-150139, OAF shRNA Plasmid (h): sc-96787-SH, OAF shRNA Plasmid (m): sc-150139-SH, OAF shRNA (h) Lentiviral Particles: sc-96787-V and OAF shRNA (m) Lentiviral Particles: sc-150139-V.

Molecular Weight of OAF: 31 kDa.

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