

OASL (L-25): sc-130832

BACKGROUND

OASL (2'-5'-oligoadenylate synthetase-like), also known as p59OASL or TRIP14 (thyroid receptor-interacting protein 14), is a 514 amino acid protein that exists as 2 alternatively spliced isoforms, designated p56 and p30, and contains 2 ubiquitin-like domains. Expressed in a variety of tissues with highest levels present in colon, stomach and testis, OASL interacts with the ligand binding domain of the thyroid receptor (TR) and is able to bind double-stranded RNA and DNA, possibly playing a role in RNA degradation and the overall inhibition of protein synthesis. The gene encoding OASL maps to human chromosome 12, which encodes over 1,100 genes and comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including hypochondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and trisomy 12p, which causes facial developmental defects and seizure disorders.

REFERENCES

- Lee, J.W., et al. 1995. Two classes of proteins dependent on either the presence or absence of thyroid hormone for interaction with the thyroid hormone receptor. *Mol. Endocrinol.* 9: 243-254.
- Rebouillat, D., et al. 1998. Molecular cloning and characterization of two related and interferon-induced 56 kDa and 30 kDa proteins highly similar to 2'-5' oligoadenylate synthetase. *Eur. J. Biochem.* 257: 319-330.
- Hartmann, R., et al. 1998. p59OASL, a 2'-5' oligoadenylate synthetase like protein: a novel human gene related to the 2'-5' oligoadenylate synthetase family. *Nucleic Acids Res.* 26: 4121-4128.
- Online Mendelian Inheritance in Man, OMIM™. 1998. Johns Hopkins University, Baltimore, MD. MIM Number: 603281. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Hovnanian, A., et al. 1999. The human 2',5'-oligoadenylate synthetase-like gene (OASL) encoding the interferon-induced 56 kDa protein maps to chromosome 12q24.2 in the proximity of the 2',5'-OAS locus. *Genomics* 56: 362-363.

CHROMOSOMAL LOCATION

Genetic locus: OASL (human) mapping to 12q24.31.

SOURCE

OASL (L-25) is a purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of OASL of human origin.

PRODUCT

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

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.

APPLICATIONS

OASL (L-25) is recommended for detection of OASL 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for OASL siRNA (h): sc-95857, OASL shRNA Plasmid (h): sc-95857-SH and OASL shRNA (h) Lentiviral Particles: sc-95857-V.

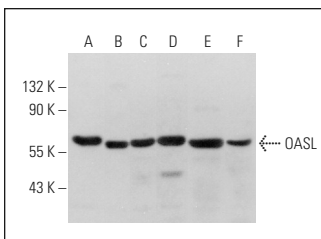
Molecular Weight of OASL: 59 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209, HeLa whole cell lysate: sc-2200 or HCT-116 whole cell lysate: sc-364175.

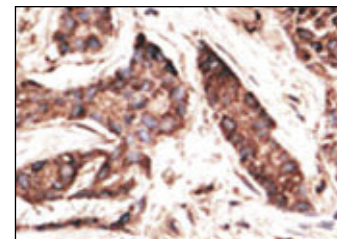
RECOMMENDED SECONDARY REAGENTS

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



OASL (L-25): sc-130832. Western blot analysis of OASL expression in HL-60 (A), U-251-MG (B), HCT-116 (C) and HeLa (D) whole cell lysates and human liver (E) and human tonsil (F) tissue extracts.



OASL (L-25): sc-130832. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human breast carcinoma tissue showing cytoplasmic localization.

PROTOCOLS

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