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OASL Antibody

Catalog # ASC11792

Product Information

Application	WB, IF, ICC, E
Primary Accession	Q15646
Other Accession	NP_003724, 11321577
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	59226
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	OASL antibody can be used for detection of OASL by Western blot at 1 - 2 g/ml. Antibody can also be used for Immunocytochemistry at 2.5 g/mL. For Immunoflorescence start at 20 g/mL.

Additional Information

Gene ID	8638
Other Names	2'-5'-oligoadenylate synthase-like protein, 2'-5'-OAS-related protein, 2'-5'-OAS-RP, 59 kDa 2'-5'-oligoadenylate synthase-like protein, Thyroid receptor-interacting protein 14, TR-interacting protein 14, TRIP-14, p59 OASL, p59OASL, OASL, TRIP14
Target/Specificity	OASL; OASL antibody is human, mouse and rat reactive.
Reconstitution & Storage	OASL antibody can be stored at 4℃ for three months and -20℃, stable for up to one year.
Precautions	OASL Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	OASL
Synonyms	TRIP14
Function	Does not have 2'-5'-OAS activity, but can bind double- stranded RNA. Displays antiviral activity against encephalomyocarditis virus (EMCV) and hepatitis C virus (HCV) via an alternative antiviral pathway independent of RNase L.
Cellular Location	[Isoform p56]: Nucleus, nucleolus. Cytoplasm.

Tissue Location	Expressed in most tissues, with the highest levels in primary blood Leukocytes and other hematopoietic system tissues, colon, stomach and to some extent in testis

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 two alternatively spliced isoforms, designated p56 and p30, and contains two ubiquitin-like domains (1). It is widely expressed in a variety of tissues and 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 (2-3). Methyl CpG-binding protein 1 (MBD1), which functions as a transcriptional repressor, was identified as a strong p59 OASL interactor (4).

References

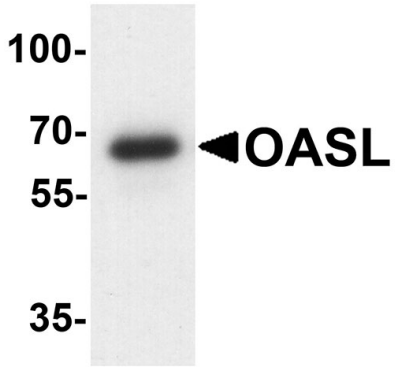
Rebouillat D, Marie I, and Hovanessian AG. Molecular cloning and characterization of two related and interferon-induced 56 kDa and 30 kDa proteins highly similar to 2'-5' oligoadenylate synthetase. Eur. J. Biochem. 1998; 257:319-30.

Hartmann R, Olsen HS, Widder S, et al. p59OASL, a 2'-5' oligoadenylate synthetase like protein: a novel human gene related to the 2'-5' oligoadenylate synthetase family. Nucleic Acids Res. 1998; 26:4121-8.

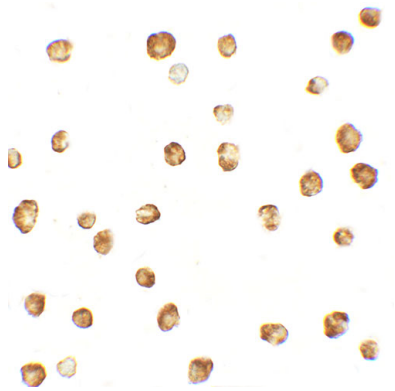
Hovnanian A, Rebouillat D, Levy ER, et al. The human 2',5'-oligoadenylate synthetaselike gene (OASL) encoding the interferon-induced 56 kDa protein maps to chromosome 12q24.2 in the proximity of the 2',5'-OAS locus. Genomics 1999; 56:362-3.

Andersen JB, Strandbyg rd DJ, Hartmann R, et al. Interaction between the 2'-5' oligoadenylate synthetase-like protein p59 OASL and the transcriptional repressor methyl CpG-binding protein 1. Eur. J. Biochem. 2004; 271:628-36.

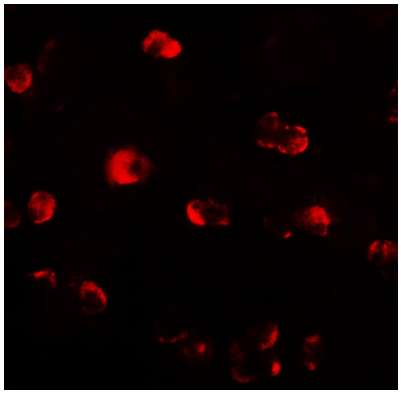
Images



Western blot analysis of OASL in mouse bladder tissue lysate with OASL antibody at 1 µg/ml.



Immunocytochemistry of OASL1 in HepG2 cells with OASL1 antibody at 2.5 µg/mL.



Immunofluorescence of OASL1 in HepG2 cells with OASL1 antibody at 20 µg/mL.

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