



OAS1, 2'-5'oligoadenylate synthetase 1 polyclonal antibody

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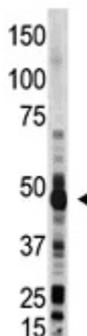
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Box 1 | Basic Info

Cat. No.	ABP-PAB-10918
Animal ID	RB1937/1938
Host	Rabbit
Reactivity	Human, Mouse
Format	Purified
Accession number	NM_002534
Amount	100 µg

Alternative Name(s): 2',5'-oligoadenylate synthetase 1 P40/P46, OIAS, IFI-4, OIASI, 2',5'-oligoadenylate synthetase 1 (40-46 kD), OAS1



WB analysis of Mouse liver tissue lysate

2'-5'-Oligoadenylate synthetases are interferon-induced enzymes that upon activation by double-stranded RNA polymerize ATP to 2'-5'-linked oligoadenylates. Three human OAS enzymes corresponding to proteins of 40/46, 69/71, and 100 kDa have been described. Based on the deduced amino acid sequences of the corresponding cDNAs, these OAS enzymes share a homologous region of about 350 amino acid residues that could represent the functional domain of OAS. OAS1 belongs to the 40/46 kDa proteins and contains one single domain, whereas the 69/71- and the 100-kDa proteins contain two and three adjacent domains, respectively. OAS proteins play a significant role in the inhibition of cellular protein synthesis and viral infection resistance. Alternative splicing of the OAS1 gene produces two protein isoforms (E16 and E18) which share identical N-terminal sequence but diverge at exon 7. Both isoforms are recognized by this antibody.

Buffers

Purified rabbit polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column and eluted out with both high and low pH buffers and neutralized immediately after elution then followed by dialysis against PBS.

Immunogen

KLH conjugated synthetic peptide comprised of amino acids 317 - 331 [RQLAQEAEAWLNYPG] of the human 2'-5'oligoadenylate synthetase 1 (OAS1) protein.

Application:

Tested by peptide-specific ELISA (1:1,000). WB (1:100~1:500)

Storage:

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C. Avoid repeated freeze-thaw cycles.

References:

1. Behera AK, Kumar M, Lockey RF, Mohapatra SS: 2'-5' Oligoadenylate synthetase plays a critical role in interferongamma inhibition of respiratory syncytial virus infection of human epithelial cells. *J. Biol. Chem.* 277(28): 25601- 25608 (2002).
2. Hovnanian A, Rebouillat D, Mattei MG, Levy ER, Marie I, Monaco AP, Hovanessian AG: The human 2',5'- oligoadenylate synthetase locus is composed of three distinct genes clustered on chromosome 12q24.2 encoding the 100-, 69-, and 40-kDa forms. *Genomics* 52 (3): 267-277 (1998).
3. Merlin G, Chebath J, Benech P, Metz R, Revel M: Molecular cloning and sequence of partial cDNA for interferon-induced (2'-5') oligo(A) synthetase mRNA from human cells. *Proc. Natl. Acad. Sci. U S A.* 80(16): 4904- 4908 (1993).