For Research Use Only

CMAS Polyclonal antibody

Catalog Number: 13006-1-AP



Basic Information

Catalog Number: GenBank Accession Number: 13006-1-AP BC016609

Concentration: GeneID (NCBI): 450 ug/ml 55907

Source: UNIPROT ID: Rabbit Q8NFW8

Isotype: Full Name:

IgG cytidine monophosphate N-Immunogen Catalog Number: acetylneuraminic acid synthetase

AG3686 Calculated MW:

48 kDa Observed MW: 48 kDa

Applications

Tested Applications: WB, IHC, IF/ICC, ELISA Species Specificity:

human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

Purification Method:

IF/ICC: 1:200-1:800

Antigen affinity purification Recommended Dilutions: WB: 1:1000-1:8000 IHC: 1:400-1:1600

Positive Controls:

WB: rat pancreas tissue, mouse brain tissue

IHC: human placenta tissue,

IF/ICC: A431 cells,

Background Information

Cytidine monophosphate N-acetylneuraminic acid synthetase (CMAS), a key enzyme in the incorporation pathway, catalyzes the synthesis of CMP-sialic acid by utilizing CTP and sialic acid. Neu5Ac is activated in the nucleus by CMAS to form CMP-Neu5Ac, which is transported to the Golgi apparatus by SLC35A1 for sialylation of glycoproteins and gangliosides catalyzed by specific sialy ltransferases (PMID: 30568043). Low CMAS gene expression correlated with reduced recurrence-free survival in a human colorectal cancer cohort (PMID: 30578646). Western blots indicated a range of bands at ~ 48 kDa.

Storage

Storage:

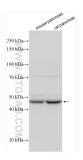
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

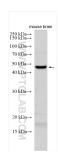
PBS with 0.02% sodium azide and 50% glycerol, pH7.3 $\,$

Aliquoting is unnecessary for -20°C storage

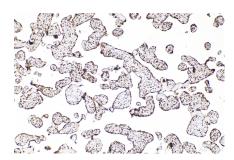
Selected Validation Data



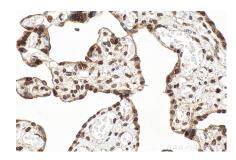
Various lysates were subjected to SDS PAGE followed by western blot with 13006-1-AP (CMAS antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



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Immunohistochemical analysis of paraffinembedded human placenta tissue slide using 13006-1-AP (CMAS antibody) at dilution of 1:800 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human placenta tissue slide using 13006-1-AP (CMAS antibody) at dilution of 1:800 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed A431 cells using CMAS antibody (13006-1-AP) at dilution of 1:400 and Multi-rAb CoraLite ® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002).