## For Research Use Only

## **COASY Monoclonal antibody**

Catalog Number: 68358-1-Ig



**Basic Information** 

Catalog Number: GenBank Accession Number:

68358-1-lg BC020985 GeneID (NCBI): 150ul, Concentration: 1000 ug/ml by 80347

Nanodrop: **UNIPROT ID:** Q13057 Mouse Full Name:

Isotype: Coenzyme A synthase

lgG1 Calculated MW: Immunogen Catalog Number: 564 aa, 62 kDa AG33142 Observed MW: 62 kDa

**Purification Method:** 

Protein G purification

CloneNo.: 1D1C11

Recommended Dilutions: WB: 1:5000-1:50000 IHC: 1:250-1:1000

FC (Intra): 0.80 ug per 10^6 cells in a

100 µl suspension

**Applications** 

**Tested Applications:** WB, IHC, FC (Intra), 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

**Positive Controls:** 

WB: LNCaP cells, HeLa cells, HepG2 cells, HEK-293 cells, Jurkat cells, K-562 cells, HSC-T6 cells, NIH/3T3

cells

IHC: human liver tissue, FC (Intra): HeLa cells,

## **Background Information**

Bifunctional coenzyme A synthase (COASY) is a bifunctional enzyme that catalyzes the fourth and fifth sequential steps of the CoA biosynthetic pathway. The fourth reaction is catalyzed by the phosphopantetheine adenylyltransferase, coded by the coaD domain; the fifth reaction is catalyzed by the dephospho-CoA kinase, coded by the coaE domain. May act as a point of CoA biosynthesis regulation. It was reported that having a key role in erythroid maturation and identified upstream and downstream metabolites of COASY as a potential treatment for anemia in patients with MDS-RS (PMID: 36857430). COASY has 2 isoforms with molecular weights of 62 and 65 kDa.

Storage

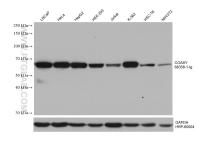
Store at -20°C. Stable for one year after shipment. Storage Buffer:

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

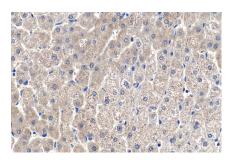
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

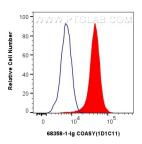
## **Selected Validation Data**



Various lysates were subjected to SDS PAGE followed by western blot with 68358-1-lg (COASY antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control



Immunohistochemical analysis of paraffinembedded human liver tissue slide using 68358-1-Ig (COASY antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1x10^6 HeLa cells were intracellularly stained with 0.8 ug COASY Monoclonal antibody (68358-1-1g, Clone:1D1C11) and CoraLite® 488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1)(red), or 0.8 ug Mouse IgG1 isotype control Mouse McAb (66360-1-1g, Clone: 1F8D3) (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set.