For Research Use Only

GMDS Polyclonal antibody

Catalog Number: 15442-1-AP

4 Publications



Basic Information

Catalog Number: GenBank Accession Number: 15442-1-AP BC000117

Size: GeneID (NCBI): 2762

Source: UNIPROT ID: Rabbit O60547

Isotype: Full Name:

GDP-mannose 4,6-dehydratase

Immunogen Catalog Number: Calculated MW:

AG7319 42 kDa

Observed MW: 40-42 kDa Purification Method: Antigen affinity purification Recommended Dilutions: WB 1:500-1:3000 IHC 1:20-1:200 IF 1:50-1:500

Applications

Tested Applications: IF/ICC, IHC, WB, ELISA Cited Applications: IP, WB

Species Specificity:

human, mouse, rat Cited Species: human

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:

 $\hbox{WB:} \ mouse \ pancreas \ tissue, HeLa \ cells, \ rat \ spleen$

tissue, rat pancreas tissue

IHC: human lymphoma tissue,

IF: HeLa cells,

Background Information

GDP-D-mannose-4,6-dehydratase (GMDS) is the key enzyme in the 'de novo' pathway of GDP-L-fucose biosynthesis (PMID:10462046). The enzyme is also named as GMD and belongs to the GDP-mannose 4,6-dehydratase family. The gene encodes a 42 kDa protein that catalyzes the conversion of GDP-mannose to GDP-4-keto-6-deoxymannose, the first step in the synthesis of GDP-fucose from GDP-mannose, using NADP+ as a cofactor.

Notable Publications

Author	Pubmed ID	Journal	Application
Yasuhiko Kizuka	27447047	Cell Chem Biol	WB
Lilli Saarinen	33503764	Mol Cell Proteomics	WB
Lilli Saarinen	30072579	Mol Cell Proteomics	WB

Storage

Storage

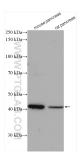
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

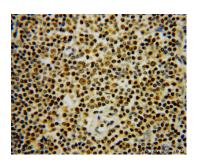
Selected Validation Data



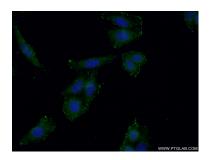
Various lysates were subjected to SDS PAGE followed by western blot with 15442-1-AP (GMDS antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded human lymphoma using 15442-1-AP (GMDS antibody) at dilution of 1:50 (under 10x lens).



Immunohistochemical analysis of paraffinembedded human lymphoma using 15442-1-AP (GMDS antibody) at dilution of 1:50 (under 40x lens).



Immunofluorescent analysis of (-20°C Ethanol) fixed Hela cells using 15442-1-AP (GMDS antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).