## For Research Use Only

# **GMDS** Polyclonal antibody

Catalog Number: 15442-1-AP 5 Publications



**Basic Information** 

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

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Size: GeneID (NCBI):

150ul , Concentration: 500 ug/ml by 2762

Nanodrop and 267 ug/ml by Bradford UNIPROT ID: method using BSA as the standard; O60547

Source: Full Name:

Rabbit GDP-mannose 4,6-dehydratase

Isotype: Calculated MW:
IgG 42 kDa
Immunogen Catalog Number: Observed MW:
AG7319 40-42 kDa

Purification Method: Antigen affinity purification Recommended Dilutions: WB 1:500-1:3000

IHC 1:500-1:2000 IF/ICC 1:200-1:800

Applications

Tested Applications:

WB, IHC, IF/ICC, ELISA

Cited Applications:

WB, IF, IP

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:**

WB: mouse pancreas tissue, HeLa cells, rat spleen

tissue, rat pancreas tissue

IHC: human pancreas cancer tissue, human colon cancer tissue, human lung cancer tissue, human

lymphoma tissue IF/ICC : 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.

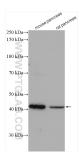
Storage Buffer

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

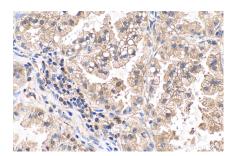
Aliquoting is unnecessary for -20°C storage

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

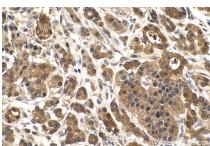
### **Selected Validation Data**



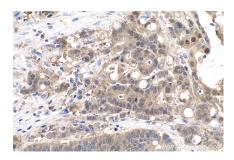
Various lysates were subjected to SDS PAGE followed by western blot with 15442-1-AP (GMDS antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



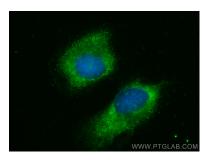
Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 15442-1-AP (GMDS antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human pancreas cancer tissue slide using 15442-1-AP (GMDS antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 15442-1-AP (GMDS antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using GMDS antibody (15442-1-AP) at dilution of 1:400 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).