For Research Use Only

GMPPB Polyclonal antibody

Catalog Number: 15094-1-AP

Featured Product

7 Publications



Basic Information

Catalog Number:

15094-1-AP

BC001141

Concentration:

600 ug/ml

29925

Source:

UNIPROT ID:

Rabbit

Q9Y5P6

Isotype:

GenBank Accession Number:

BC001141

GeneID (NCBI):

29925

UNIPROT ID:

Rabit

Q9Y5P6

Full Name:

Full Name: GDP-mannose pyrophosphorylase B

Immunogen Catalog Number: Calculated MW:

AG7168 40 kDa

Observed MW: 40-43 kDa

Applications

Tested Applications: WB, IHC, IF/ICC, ELISA Cited Applications: WB, IHC, IF Species Specificity: human, mouse, rat

human, mouse, zebrafish

Cited Species:

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 skeletal muscle tissue, mouse brain tissue,

Purification Method:

WB 1:500-1:2000 IHC 1:50-1:500

IF/ICC 1:50-1:500

Antigen affinity purification

Recommended Dilutions:

rat skeletal muscle tissue

IHC: human ovary cancer tissue,

IF/ICC: HEK-293 cells,

Background Information

GMPPB is a cytoplasmic enzyme that catalyzes the formation of GDP-mannose, a key substrate for several glycosylation pathways, including O-mannosylation of α -DG. GMPPB facilitates the formation of the sugar donor GDP-mannose and pyrophosphate from mannose-1-phosphate and GTP, a very early step in the glycosylation pathway (PMID: 37834154, 27147698). GMPPB mutations correlate with several congenital diseases, including severe congenital muscular dystrophy (CMD) with abnormalities in the brain and eye (PMID: 26310427, 30684953). Western blot analysis detected GMPPB at an apparent molecular mass of 40 kDa.

Notable Publications

Author	Pubmed ID	Journal	Application
Patricia Franzka	36313076	Front Nutr	WB
Norio Sasaoka	30529953	iScience	WB
Patricia Franzka	34124155	Front Mol Biosci	WB

Storage

Storage:

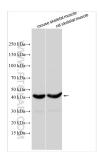
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

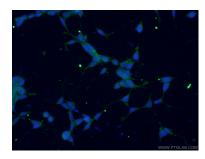
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 15094-1-AP (GMPPB antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (-20°C Ethanol) fixed HEK-293 cells using 15094-1-AP (GMPPB antibody) at dilution of 1:50 and Alexa Fluor 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunohistochemical analysis of paraffinembedded human ovary cancer tissue slide using 15094-1-AP (GMPPB antibody) at dilution of 1:100 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).