

# MAN1B1 Monoclonal antibody

Catalog Number: 68121-1-Ig

## Basic Information

**Catalog Number:**

68121-1-Ig

**Size:**

1000 µg/ml

**Source:**

Mouse

**Isotype:**

IgG2b

**Immunogen Catalog Number:**

AG28302

**GenBank Accession Number:**

BC002953

**GeneID (NCBI):**

11253

**UNIPROT ID:**

Q9UKM7

**Full Name:**

mannosidase, alpha, class 1B, member 1

**Calculated MW:**

80 kDa

**Observed MW:**

80 kDa

**Purification Method:**

Protein A purification

**CloneNo.:**

3C9F10

**Recommended Dilutions:**

WB 1:1000-1:6000

IF/ICC 1:400-1:1600

## Applications

**Tested Applications:**

WB, IF/ICC, ELISA

**Species Specificity:**

Human

**Positive Controls:**

**WB :** HeLa cells, MCF-7 cells, HEK-293 cells, LNCaP cells, HaCaT cells, U-87 MG cells, HepG2 cells

**IF/ICC :** U2OS cells,

## Background Information

MAN1B1, also known as ERMAN1, MANA-ER, belongs to the glycosyl hydrolase 47 family. MAN1B1 is involved in glycoprotein quality control targeting of misfolded glycoproteins for degradation, specifically converting Man9GlcNAc to Man8GlcNAc isomer B. At high enzyme concentrations, it further trims the carbohydrates to Man5-6GlcNAc2 (PMID: 18003979). Mutations in MAN1B1 cause autosomal-recessive intellectual disability. This gene has been associated with Rafiq syndrome (PMID: 21763484).

## Storage

**Storage:**

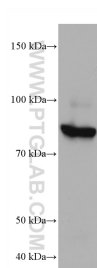
Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

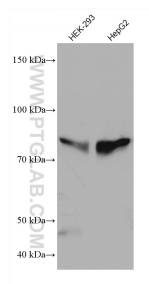
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

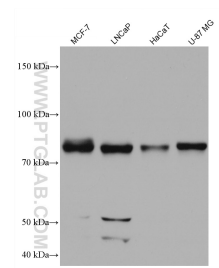
## Selected Validation Data



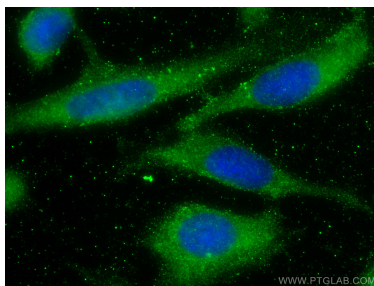
HeLa cells were subjected to SDS PAGE followed by western blot with 68121-1-Ig (MAN1B1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Various lysates were subjected to SDS PAGE followed by western blot with 68121-1-Ig (MAN1B1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Various lysates were subjected to SDS PAGE followed by western blot with 68121-1-Ig (MAN1B1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (-20°C Ethanol) fixed U2OS cells using MAN1B1 antibody (68121-1-Ig, Clone: 3C9F10) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).