

Anti-MAN2A1 Antibody [PSH02-67] - BSA and Azide free

HA750824



Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P, FC
Molecular Wt:	Predicted band size: 131 kDa
Clone number:	PSH02-67

Description: This gene encodes a glycosyl hydrolase that localizes to the Golgi and catalyzes the final hydrolytic step in the asparagine-linked oligosaccharide (N-glycan) maturation pathway. Mutations in the mouse homolog of this gene have been shown to cause a systemic autoimmune disease similar to human systemic lupus erythematosus. Catalyzes the first committed step in the biosynthesis of complex N-glycans. It controls conversion of high mannose to complex N-glycans; the final hydrolytic step in the N-glycan maturation pathway.

Immunogen: Recombinant protein within human MAN2A1 aa 51-500 / 1,144.

Positive control: HepG2 cell lysate, Huh7 cell lysate, JAR cell lysate, U-87 MG cell lysate, HUVEC cell lysate, A375 cell lysate, MDA-MB-468 cell lysate, NCI-H226 cell lysate, Human liver tissue lysate, Human lung tissue lysate, Human kidney tissue lysate, human colon cancer tissue, human stomach tissue, U-87 MG.

Subcellular location: Golgi apparatus membrane.

Database links: SwissProt: Q16706 Human

Recommended Dilutions:

WB	1:1,000
IHC-P	1:1,000
FC	1:1,000

Storage Buffer: 1*PBS (pH7.4).

Storage Instruction: Store at +4°C after thawing. Aliquot store at -20°C. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

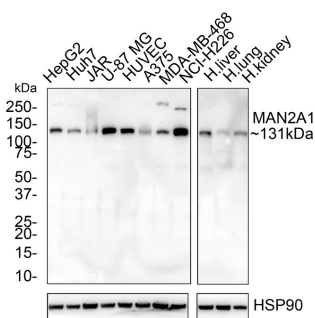
Technical:0086-571-89986345

Service mail:support@huabio.cn

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Images

Fig1: Western blot analysis of MAN2A1 on different lysates with Rabbit anti-MAN2A1 antibody (HA750824) at 1/1,000 dilution.



- Lane 1: HepG2 cell lysate
- Lane 2: Huh7 cell lysate
- Lane 3: JAR cell lysate
- Lane 4: U-87 MG cell lysate
- Lane 5: HUVEC cell lysate
- Lane 6: A375 cell lysate
- Lane 7: MDA-MB-468 cell lysate
- Lane 8: NCI-H226 cell lysate
- Lane 9: Human liver tissue lysate
- Lane 10: Human lung tissue lysate
- Lane 11: Human kidney tissue lysate

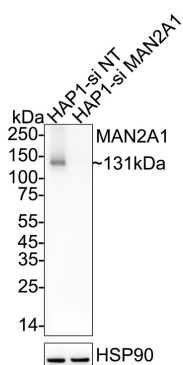
Lysates/proteins at 30 µg/Lane.

Predicted band size: 131 kDa
Observed band size: 131 kDa

Exposure time: 5 minutes; ECL: K1802;
4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA750824) at 1/1,000 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

Fig2: Western blot analysis of MAN2A1 on different lysates with Rabbit anti-MAN2A1 antibody (HA750824) at 1/1,000 dilution.



- Lane 1: HAP1-parental cell lysate (10 µg/Lane)
- Lane 2: HAP1-MAN2A1 KD cell lysate (10 µg/Lane)

Predicted band size: 131 kDa
Observed band size: 131 kDa

Exposure time: 59 seconds; ECL: K1801;
4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA750824) at 1/1,000 dilution was used in 5% NFDM/TBST at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

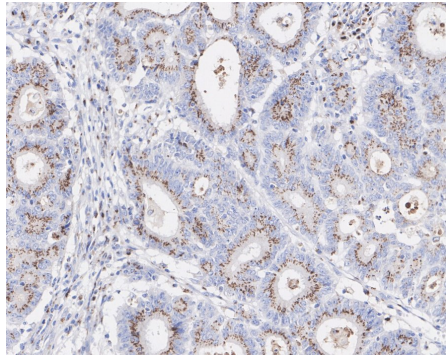


Fig3: Immunohistochemical analysis of paraffin-embedded human colon cancer tissue with Rabbit anti-MAN2A1 antibody (HA750824) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (HA750824) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

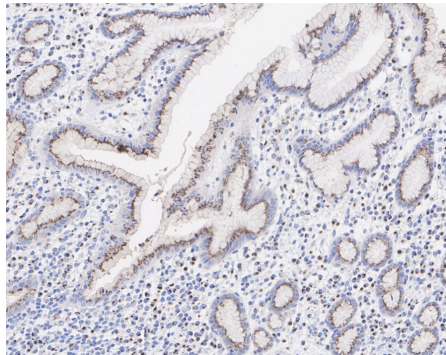


Fig4: Immunohistochemical analysis of paraffin-embedded human stomach tissue with Rabbit anti-MAN2A1 antibody (HA750824) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (HA750824) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

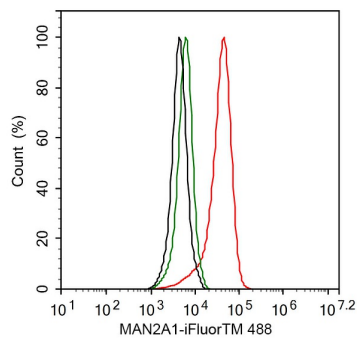


Fig5: Flow cytometric analysis of U-87 MG cells labeling MAN2A1.

Cells were washed twice with cold PBS and resuspend. Then stained with the primary antibody (HA750824, 1/1,000) (red) compared with Mouse IgG Isotype Control (green). After incubation of the primary antibody at +4 °C for an hour, the cells were stained with a iFluor™ 488 conjugate-Goat anti-Mouse IgG Secondary antibody (HA1125) at 1/1,000 dilution for 30 minutes at +4 °C. Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Zha K, Ye Q. Golgi α -mannosidase II mediates the formation of vascular smooth muscle foam cells under inflammatory stress. *Folia Histochem Cytobiol.* 2021;59(2):134-143. doi: 10.5603/FHC.a2021.0015. Epub 2021 Jun 21.
2. Morales-Quintana L, Méndez-Yáñez A. α -Mannosidase and β -D-N-acetylhexosaminidase outside the wall: partner exoglycosidases involved in fruit ripening process. *Plant Mol Biol.* 2023 Jun;112(3):107-117. doi: 10.1007/s11103-023-01356-2. Epub 2023 May 13.

