Product Datasheet

GRP78/HSPA5 Antibody - BSA Free
NBP1-06277

Unit Size: 0.1 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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Publications: 2

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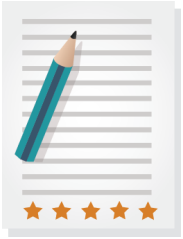
Updated 2/17/2025 v.20.1



NBP1-06277

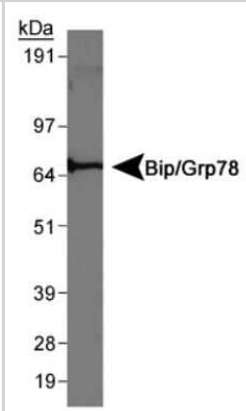
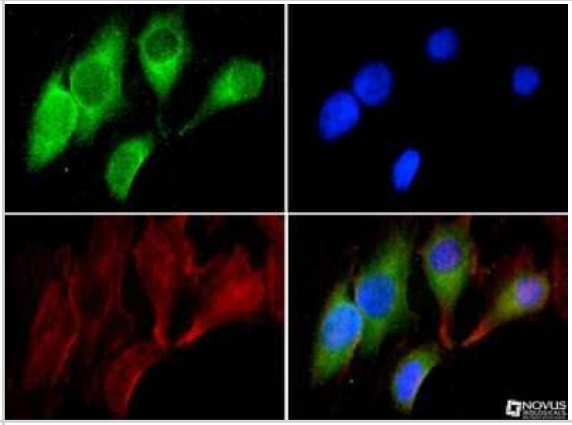
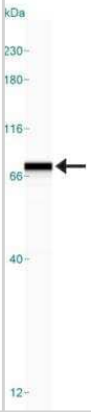
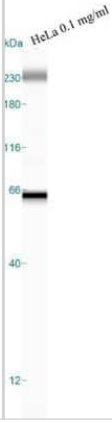
GRP78/HSPA5 Antibody - BSA Free

Product Information	
Unit Size	0.1 ml
Concentration	1.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.1% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS and 30% Glycerol
Target Molecular Weight	78 kDa

Product Description	
Host	Rabbit
Gene ID	3309
Gene Symbol	HSPA5
Species	Human, Mouse, Rat
Marker	ER Stress Marker
Immunogen	Synthetic peptide made to a C-terminal portion of rat GRP78 (within residues 600-654). [Swiss-Prot# P06761]

Product Application Details	
Applications	Western Blot, Simple Western, Immunocytochemistry/ Immunofluorescence
Recommended Dilutions	Western Blot 0.5 ug/ml, Simple Western 1:25, Immunocytochemistry/ Immunofluorescence 1:50
Application Notes	This GRP78 antibody is useful for Immunocytochemistry/Immunofluorescence and Western blot, where a band is seen at approx. 78 kDa. In Simple Western only 10 - 15 uL of the recommended dilution is used per data point. See Simple Western Antibody Database for Simple Western validation: Tested in HeLa lysate 1.0 mg/mL, separated by Size, antibody dilution of 1:25, apparent MW was 77 kDa. Separated by Size-Wes, Sally Sue/Peggy Sue.

Images

Western Blot: GRP78/HSPA5 Antibody [NBP1-06277] - Detection of Bip/Grp78 in rat liver.	
Immunocytochemistry/Immunofluorescence: GRP78/HSPA5 Antibody [NBP1-06277] - BIP/Grp78 antibody was tested in HeLa cells with DyLight 488 (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and DyLight 550 (red).	
Simple Western: GRP78/HSPA5 Antibody [NBP1-06277] - Lane view shows a specific band for GRP78 in 1.0 mg/ml of HeLa lysate. This experiment was performed under reducing conditions using the 12-230kDa separation system.	
Simple Western: GRP78/HSPA5 Antibody [NBP1-06277] - Lane view shows a specific band detected for GRP78 in HeLa lysate. This experiment was performed under reducing conditions using the Wes or Sally Sue separation system 12-230kDa (or 66-440kDa).	

Publications

Weaver FE, White E, Peek AM et Al. 4-Phenylbutyric acid mitigates ER stress-induced neurodegeneration in the spinal cords of a GM2 gangliosidosis mouse model Hum Mol Genet 2024-11-12 [PMID: 39530163]

Pandey R, Bakay M, Strenkowski BP et al. JAK/STAT inhibitor therapy partially rescues the lipodystrophic autoimmune phenotype in Clec16a KO mice Scientific reports 2021-04-01 [PMID: 33795715] (WB, Mouse)

Procedures

Protocol specific for GRP78 Antibody (NBP1-06277)
GRP78/HSPA5 Antibody:
Western Blot Protocol

1. Perform SDS-PAGE (4-12% MOPS) on samples to be analyzed, loading 30 ug of total protein per lane.
2. Transfer proteins to Nitrocellulose according to the instructions provided by the manufacturer of the transfer apparatus.
3. Rinse membrane with dH2O and then stain the blot using Ponceau S for 1-2 minutes to access the transfer of proteins onto the nitrocellulose membrane. Rinse the blot in water to remove excess stain and mark the lane locations and locations of molecular weight markers using a pencil.
4. Rinse the blot in TBS for approximately 5 minutes.
5. Block the membrane using 5% NFDM + 1% BSA in TBS + Tween, 1 hour at RT.
6. Rinse the membrane in dH2O and then wash the membrane in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each.
7. Dilute the rabbit anti-BiP primary antibody (NBP1-06277) in blocking buffer and incubate 1 hour at room temperature.
8. Rinse the membrane in dH2O and then wash the membrane in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each.
9. Apply the diluted rabbit-IgG HRP-conjugated secondary antibody in blocking buffer (as per manufacturers instructions) and incubate 1 hour at room temperature.
10. Wash the blot in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each (this step can be repeated as required to reduce background).
11. Apply the detection reagent of choice in accordance with the manufacturers instructions (Pierce ECL).

Note: Tween-20 can be added to the blocking or antibody dilution buffer at a final concentration of 0.05-0.2%, provided it does not interfere with antibody-antigen binding.

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Products Related to NBP1-06277

NB800-PC1	HeLa Whole Cell Lysate
NBP1-06277PEP	GRP78/HSPA5 Antibody Blocking Peptide
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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