

A23453

Leader in Biomolecular Solutions for Life Science



BiP/GRP78 Rabbit mAb

Catalog No.: A23453

Recombinant

14 Publications

Basic Information

Observed MW

78 kDa

Calculated MW

72 kDa

Category

Monoclonal Antibody

Applications

WB,IHC-P,IF/ICC,ELISA

Cross-Reactivity

Human,Mouse,Rat,Pig

CloneNo number

ARC54734

Recommended Dilutions

WB 1:6000 - 1:30000

IF/ICC 1:200 - 1:400

IHC-P 1:5000 - 1:20000

ELISA Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

Contact



www.abclonal.com

Background

The protein encoded by this gene is a member of the heat shock protein 70 (HSP70) family. This protein localizes to the lumen of the endoplasmic reticulum (ER) where it operates as a typical HSP70 chaperone involved in the folding and assembly of proteins in the ER and is a master regulator of ER homeostasis. During cellular stress, as during viral infection or tumorigenesis, this protein interacts with the transmembrane stress sensor proteins PERK (protein kinase R-like endoplasmic reticulum kinase), IRE1 (inositol-requiring kinase 1), and ATF6 (activating transcription factor 6) where it acts as a repressor of the unfolded protein response (UPR) and also plays a role in cellular apoptosis and senescence. Elevated expression and atypical translocation of this protein to the cell surface has been reported in viral infections and some types of cancer cells. At the cell surface this protein may facilitate viral attachment and entry to host cells. This gene is a therapeutic target for the treatment of coronavirus diseases and chemoresistant cancers.

Immunogen Information

Gene ID

3309

Swiss Prot

P11021

Immunogen

Synthetic peptide. This information is considered to be commercially sensitive.

Synonyms

BIP; GRP78; HEL-S-89n; BiP/GRP78

Product Information

Source

Rabbit

Isotype

IgG

Purification

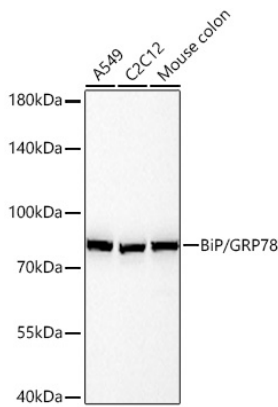
Affinity purification

Storage

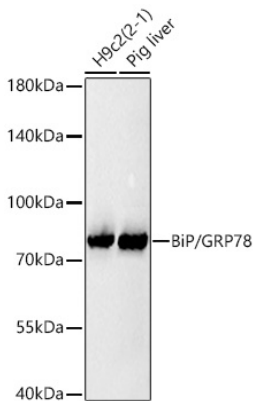
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS containing 50% glycerol and 0.05% BSA, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

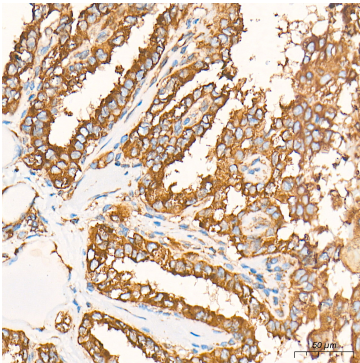
Validation Data



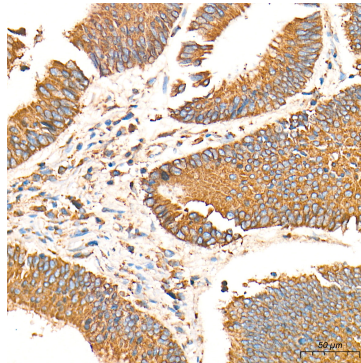
Western blot analysis of various lysates using BiP/GRP78 Rabbit mAb (A23453) at 1:15000 dilution incubated overnight at 4°C.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 10s.



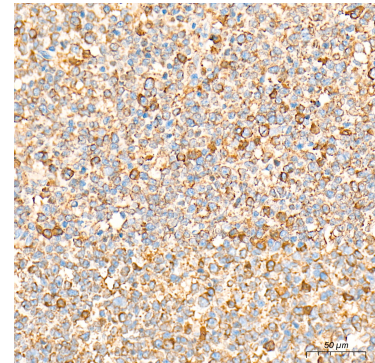
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Immunohistochemistry analysis of paraffin-embedded Human thyroid cancer tissue using BiP/GRP78 Rabbit mAb (A23453) at a dilution of 1:8000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.

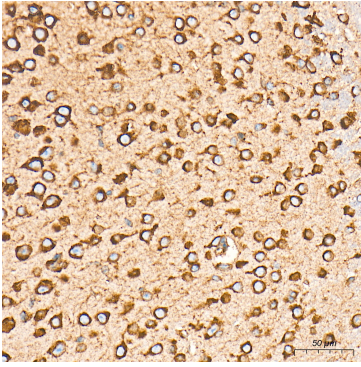


Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma tissue using BiP/GRP78 Rabbit mAb (A23453) at a dilution of 1:8000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.

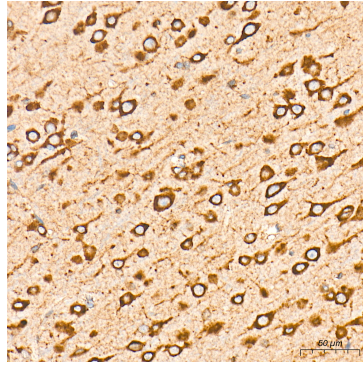


Immunohistochemistry analysis of paraffin-embedded Human tonsil tissue using BiP/GRP78 Rabbit mAb (A23453) at a dilution of 1:8000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.

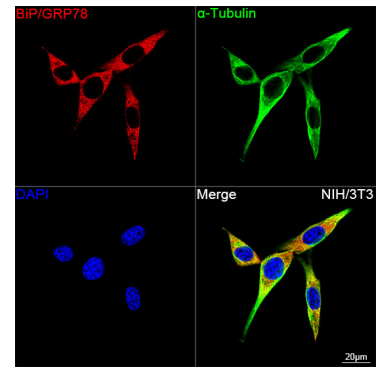
Validation Data



Immunohistochemistry analysis of paraffin-embedded Mouse brain tissue using BiP/GRP78 Rabbit mAb (A23453) at a dilution of 1:8000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Rat brain tissue using BiP/GRP78 Rabbit mAb (A23453) at a dilution of 1:8000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Confocal imaging of NIH/3T3 cells using BiP/GRP78 Rabbit mAb (A23453, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α-Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.