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GRP170 Antibody
GRP170 Antibody, Clone 6E3-2C3
Catalog # ASM10160

Specification

GRP170 Antibody - Product Information

Application	**WB, ICC**
Primary Accession	Q9Y4L1
Other Accession	NP_006389.3
Host	**Mouse**
Isotype	**IgG2b**
Reactivity	**Human, Mouse, Rat**
Clonality	**Monoclonal**

Description
Mouse Anti-Human GRP170 Monoclonal IgG2bK

Target/Specificity
Detects ~170kDa.

Other Names
ORP150 Antibody, HSP12A Antibody, Hypoxia up regulated 1 Antibody, Orp150 Antibody, Glucose regulated Antibody 170 Antibody, 150kDa oxygen regulated Antibody Antibody

Immunogen
Raised against a synthetic peptide of human GRP170

Purification
Protein G Purified

Storage	**-20ºC**

Storage Buffer
PBS pH7.4, 50% glycerol, 0.1% sodium azide

Shipping Temperature	**Blue Ice or 4ºC**

Certificate of Analysis
1 µg/ml of SMC-232 was sufficient for detection of GRP170 in 20 µg of HEK293 lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

Cellular Localization
Endoplasmic Reticulum | Endoplasmic Reticulum Lumen

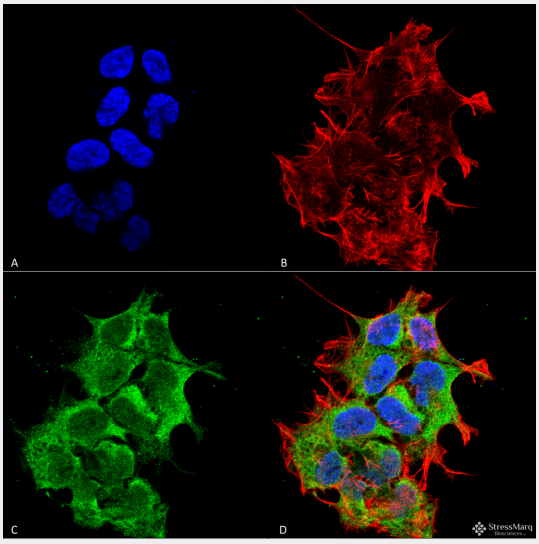
GRP170 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

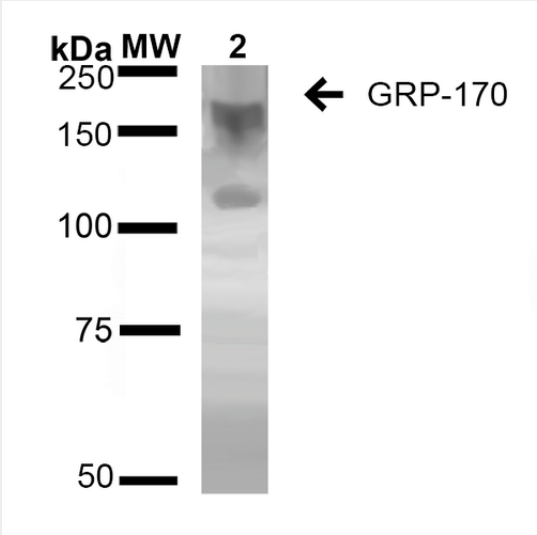
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry

- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

GRP170 Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-GRP170 Monoclonal Antibody, Clone 6E3-2C3 (ASM10160). Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-GRP170 Monoclonal Antibody (ASM10160) at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:100 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000; 1:5000 for 60 min RT, 5 min RT. Localization: Endoplasmic Reticulum, Endoplasmic Reticulum Lumen. Magnification: 60X. (A) DAPI (blue) nuclear stain. (B) Phalloidin Texas Red F-Actin stain. (C) GRP170 Antibody. (D) Composite.



Western Blot analysis of Human Embryonic kidney epithelial cell line (HEK293) lysates showing detection of ~170 kDa GRP170 protein using Mouse Anti-GRP170 Monoclonal Antibody, Clone 6E3-2C2 (ASM10160). Lane 1: Molecular Weight Ladder (MW). Lane 2: HEK-293 cell lysate. Load: 20 µg. Block: 2% BSA and 2% Skim Milk in 1X TBST. Primary Antibody: Mouse Anti-GRP170 Monoclonal Antibody (ASM10160) at 1:1000 for 16 hours at 4°C. Secondary Antibody: Goat

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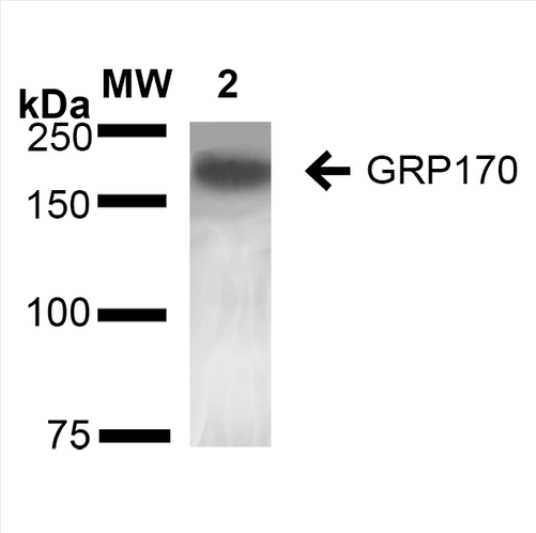
Anti-Mouse IgG: HRP at 1:100 for 60 min at RT. Color Development: ECL solution for 6 min in RT. Predicted/Observed Size: ~170 kDa. Other Band(s): 100 kDa.



Western Blot analysis of Rat Liver showing detection of ~170 kDa GRP170 protein using Mouse Anti-GRP170 Monoclonal Antibody, Clone 6E3-2C3 (ASM10160). Lane 1: Molecular Weight Ladder (MW). Lane 2: Rat Liver cell lysate. Load: 20 µg. Block: 2% BSA and 2% Skim Milk in 1X TBST. Primary Antibody: Mouse Anti-GRP170 Monoclonal Antibody (ASM10160) at 1:1000 for 16 hours at 4°C. Secondary Antibody: Goat Anti-Mouse IgG: HRP at 1:100 for 60 min at RT. Color Development: ECL solution for 6 min in RT. Predicted/Observed Size: ~170 kDa.

GRP170 Antibody - Background

GRP170, also known as ORP150, is the largest member of glucose-regulated Antibodys, and acts as a human chaperone Antibody. It is thought to play an important role in Antibody folding and secretion in the ER. Suppression of the Antibody is associated with accelerated apoptosis, therefore having an important cryoprotective role in hypoxia-induced cellular pertubation. This cryopotective role has led to an anti-tumor immune response, which will hopefully lead to therapeutic immunizations against cancers (1). GRP170 has also been shown to bind with dendritic cells and provide the danger signals to induce anti-tumor immune responses (2).

GRP170 Antibody - References

1. Wang H., et al. (2014) Front Oncol. 4: 377.
2. Manjili M.H., et al. (2006) Immun. Cell Biol. 84: 203-208.