Product Datasheet

GRP78 BiP Antibody

Catalog No: #48119

Package Size: #48119-1 50ul #48119-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

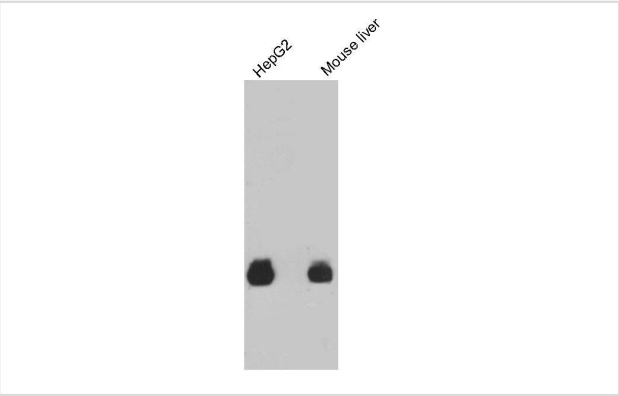
Description

Product Name	GRP78 BiP Antibody
Host Species	Mouse
Clonality	Monoclonal
Clone No.	C9-9
Purification	ProA affinity purified
Applications	WB, ICC, IHC
Species Reactivity	Hu, Ms
Immunogen Description	recombinant protein
Other Names	78 kDa glucose regulated protein antibody 78 kDa glucose-regulated protein antibody AL022860 antibody AU019543 antibody BIP antibody D2Wsu141e antibody D2Wsu17e antibody Endoplasmic reticulum lumenal Ca(2+)-binding protein grp78 antibody Endoplasmic reticulum lumenal Ca2+ binding protein grp78 antibody Epididymis secretory sperm binding protein Li 89n antibody FLJ26106 antibody Glucose Regulated Protein 78kDa antibody GRP 78 antibody GRP-78 antibody GRP78 antibody GRP78_HUMAN antibody Heat shock 70 kDa protein 5 antibody Heat Shock 70kDa Protein 5 antibody Heat shock protein family A (Hsp70) member 5 antibody HEL S 89n antibody Hsce70 antibody HSPA 5 antibody HSPA5 antibody Immunoglobulin Heavy Chain Binding Protein antibody Immunoglobulin heavy chain-binding protein antibody mBiP antibody MIF2 antibody Sez7 antibody
Accession No.	Swiss-Prot#:P11021
Calculated MW	78kDa
Formulation	1*TBS (pH7.4), 0.5%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

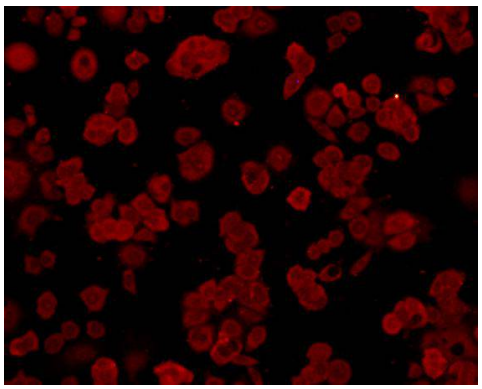
Application Details

WB: 1:2,000-1:5,000ICC: 1:50-1:100

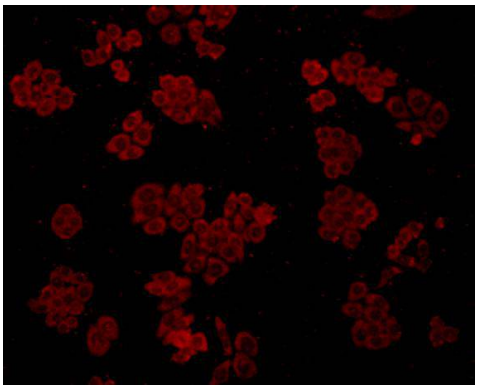
Images



Western blot analysis on cell lysates using anti- GRP78 mouse mAb.



ICC staining GRP78 in MCF-7 cells (red). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining GRP78 in HepG2 cells (red). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

Background

Binding immunoglobulin protein (BiP) also known as 78 kDa glucose-regulated protein (GRP-78) or heat shock 70 kDa protein 5 (HSPA5) is a protein that in humans is encoded by the HSPA5 gene. BiP is a HSP70 molecular chaperone located in the lumen of the endoplasmic reticulum (ER) that binds newly synthesized proteins as they are translocated into the ER, and maintains them in a state competent for subsequent folding and oligomerization. BiP is also an essential component of the translocation machinery, as well as playing a role in retrograde transport across the ER membrane of aberrant proteins destined for degradation by the proteasome. Like many stress and heat shock proteins, BiP/GRP78 has potent immunological activity when released from the internal environment of the cell into the extracelluar space.specifically, it feeds anti-inflammatory and pro-resolutory signals into immune networks, thus helping to resolve inflammation.

References

1."Human XTP3-B forms an endoplasmic reticulum quality control scaffold with the HRD1-SEL1L ubiquitin ligase complex and BiP." Hosokawa N., Wada I., Nagasawa K., Moriyama T., Okawa K., Nagata K. J. Biol. Chem. 283:20914-20924(2008) 2."Crystal structures of the ATPase domains of four human Hsp70 isoforms: HSPA1L/Hsp70-hom, HSPA2/Hsp70-2, HSPA6/Hsp70B', and HSPA5/BiP/GRP78." Wisniewska M., Karlberg T., Lehtio L., Johansson I., Kotenyova T., Moche M., Schuler H. PLoS ONE 5:E8625-E8625(2010) 3."Adenosine-derived inhibitors of 78 kDa glucose regulated protein (Grp78) ATPase: insights into isoform selectivity." Macias A.T., Williamson D.S., Allen N., Borgognoni J., Clay A., Daniels Z., Dokurno P., Drysdale M.J., Francis G.L., Graham C.J., Howes R., Matassova N., Murray J.B., Parsons R., Shaw T., Surgenor A.E., Terry L., Wang Y., Wood M., Massey A.J. J. Med. Chem. 54:4034-4041(2011)

Published Papers

el at., Sestrin2 Overexpression Ameliorates Endoplasmic Reticulum Stress-Induced Apoptosis via Inhibiting mTOR Pathway in HepG2 Cells. In Int J Endocrinol on 2022 Dec 10 by Huiling Hu, Zhijun Luo, et al..PMID:36536875, , (2022)

PMID:36536875

Note: This product is for in vitro research use only and is not intended for use in humans or animals.