

Anti-GRP78 BiP/HSPA5 Antibody Picoband® Fluoro647 Conjugated

Catalog Number: PB9640-Fluoro647

About HSPA5

HSPA5 (heat shock 70kDa protein 5), also known as glucose-regulated protein, 78kD (GRP78) or BiP, is a member of the heat-shock protein-70 (HSP70) family and is involved in the folding and assembly of proteins in the endoplasmic reticulum. 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. The HSPA5 gene is mapped on 9q33.3. Shen et al. (2002) concluded that HSPA5 retains ATF6 in the ER by inhibiting its Golgi localization signals and that dissociation of HSPA5 during ER stress allows ATF6 to be transported to the Golgi. The findings of Shen et al. (2002) demonstrated that HSPA5 is a key element in sensing the folding capacity within the ER.

Overview

Product Name	Anti-GRP78 BiP/HSPA5 Antibody Picoband® Fluoro647 Conjugated
Reactive Species	Human, Mouse, Rat
Application	Recommended applications are based on the parent unconjugated antibody (IF, IHC, ICC, WB). Customers may select suitable applications according to their experimental needs.
Clonality	Polyclonal
Formulation	Each vial contains 50% glycerol, 0.9% NaCl, 0.2% Na ₂ HPO ₄ , 0.02% NaN ₃ .
Storage Instructions	At -20°C for one year from date of receipt. Avoid repeated freezing and thawing. Protect from light.
Host	Rabbit
Uniprot ID	P11021

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human GRP78 BiP, identical to the related mouse and rat sequences.
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Liquid
Concentration	0.5 mg/mL
Purification	Immunogen affinity purified.
Conjugate	Fluoro647 Excitation Wavelength: 650 nm Emission Wavelength: 665 nm

Suggested Dilutions

Optimal dilutions should be determined by end users.

8 Publications Citing This Product

1. PubMed ID: 31500865, Chi L, Jiao D, Nan G, Yuan H, Shen J, Gao Y. miR-9-5p attenuates ischemic stroke through targeting ERMP1-mediated endoplasmic reticulum stress. *Acta Histochem.* 2019 Nov; 121(8):151438. doi:10.1016/j.acthis.2019.08.005. Epub 2019 Sep 7. PMID:31500865.
2. PubMed ID: 33819629, Huang Y, Zhao C, Kong Y, Tan P, Liu S, Liu Y, Zeng F, Yuan Y, Zhao B, Wang J. Elucidation of the mechanism of NEFA-induced PERK-eIF2alpha signaling pathway regulation of lipid metabolism in bovine hepatocytes. *J Steroid Biochem Mol Biol.* 2021 Apr 2:105893. doi:10.1016/j.jsbmb.2021.105893. Epub ahead of print. PMID:33819629.
3. PubMed ID: -, Pei-pei Fang, Chen-wei Pan, Wei Lin, Jie Li, Shan-shan Huang, Guang-yao Zhou, Wen-jun Du, Qiang Li, "ASK1 Enhances Angiotensin II-Induced Liver Fibrosis In Vitro by Mediating Endoplasmic Reticulum Stress-Dependent Exosomes", *Mediators of Inflammation*, vol. 2020, Art

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