

Datasheet for 200-301-F26

Erp57 (Grp58) Antibody**Overview**

Description:	Anti-Erp57 (Grp58) (MOUSE) Monoclonal Antibody - 200-301-F26
Item No.:	200-301-F26
Size:	200 µg
Applications:	IF, IHC, IP, WB
Reactivity:	Human, Mouse, Rat, Bovine, Dog, Guinea Pig, Hamster, Monkey, Pig, Rabbit
Host Species:	Mouse

Product Details

Background:	Erp57, also known as Glucose Regulated Protein 58 (Grp58), Hormone-Induced Protein-70 (HIP-70) and microsomal Carnitine Palmitoyltransferase, is a member of the protein disulfide isomerase family, containing two canonical CXHC tetrapeptide active site motifs. It has quite a few diverse roles. It functions as an accessory oxidoreductase involved in disulfide bond formation. In the ER, Erp57 interacts with membrane bound calnexin and soluble calreticulin (lectin chaperones) via their praline rich P-domain arms. Lectin chaperones bind nascent non-native glycoproteins, and position Erp57 to act upon the immature or misfolded glycoproteins that possess mono-glucosylated side chains. Erp57 deletion impairs posttranslational phases of influenza hema-glutinin folding, and causes accelerated release of MHC-I molecules, resulting in the coupling of sub-optimal peptides and reduced expression and stability on the cell surface. Erp57 also contains two thioredoxin active-site sequences, CGHC and an estrogen-binding domain. Erp57 is induced by both estrogen and leuteinizing-hormone-releasing hormone in the hippocampus.
Synonyms:	ERp60, ERp61, Grp57, Grp58, P58, PDIA3, PI PLC, Protein disulfide-isomerase A3, 58 kDa glucose-regulated protein, 58 kDa microsomal protein, Disulfide isomerase ER-60, Endoplasmic reticulum resident protein 57, Endoplasmic reticulum resident protein 60
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	Map.ERP57
Format:	IgG1

Target Details

Gene Name:	PDIA3
Reactivity:	Human, Mouse, Rat, Bovine, Dog, Guinea Pig, Hamster, Monkey, Pig, Rabbit
Immunogen Type:	Recombinant Protein
Immunogen:	Erp57 (Grp58) Antibody was produced in mice by repeated immunizations with a human Recombinant Erp57 (Grp58).
Purity/Specificity:	Anti-Erp57 (Grp58) Antibody was purified by Protein G chromatography. A BLAST analysis was used to suggest cross-reactivity with Erp57 (Grp58) from Human, Mouse, Bovine, Canine, Guinea pig, Hamster, Monkey, Pig, Rabbit, and Rat based on 100% homology with the immunizing sequence. Cross-reactivity with Erp57 (Grp58) from other sources has not been determined. Heat Shock research.
Relevant Links:	• UniProtKB - P30101 • NCBI - NP_005304.3 • GeneID - 2923

Application Details

Tested Applications:	IF, IHC, IP, WB
Application Note:	Anti-EC SOD Antibody has been tested in WB, IP, IF, and IHC-P. Expect a band approximately ~57kDa in specific lysates. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
IHC:	User Optimized
IP:	User Optimized
WB:	1:2000

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	1X PBS, pH 7.4
Preservative:	0.09% (w/v) Sodium Azide

Stabilizer: 50% (v/v) Glycerol

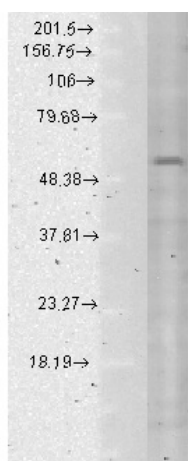
Shipping & Handling

Shipping Condition: Dry Ice

Storage Condition: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiration: Expiration date is one (1) year from date of receipt.

Images



Erp57

Western Blot

Western Blot of mouse anti-Erp57 antibody. Lane 1: human cell line. Lane 2: none. Load: 35 µg per lane. Primary antibody: Erp57 antibody at 1:1000 for overnight at 4°C. Secondary antibody: IRDye800™ mouse secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 56.8 kDa, ~55 kDa for Erp57. Other band(s): none.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.