

## Mouse Protein Disulfide Isomerase (PDI) ELISA Kit-Sandwich

**Cat. No.:** EK6F795

**Product Type:** Animal Immunoassay Kits

**Size:** 48T;96T

### Product Overview

BioVenic Mouse Protein Disulfide Isomerase (PDI) ELISA Kit-Sandwich is designed for the quantitative determination of Mouse PDI in serum, plasma, tissue homogenate, cell culture supernatant, cell lysate, and other biological fluids using a Sandwich ELISA method. For research use only.

### Specifications

Assay Type	ELISA-Sandwich
Specificity	The assay kit is specific for Mouse Protein Disulfide Isomerase (PDI).
Target Species	Mouse
Species Reactivity	Mouse
Detection Range	0.32-20 ng/mL
Reproducibility	Intra-Assay: CV < 10%; Inter-Assay: CV < 12%
Assay Time	Around 90 min
Sample Requirement	Serum, plasma, tissue homogenate, cell culture supernatant, cell lysate, and other biological fluids.

### Target Information

In mice, protein disulfide isomerase (PDI) has significant physiological and pathological roles, primarily in protein folding, redox regulation, cell signaling, and disease processes. PDI facilitates the correct folding of proteins by catalyzing the formation and rearrangement of non-native disulfide bonds within the endoplasmic reticulum. This function is crucial for maintaining protein homeostasis, particularly during spermatogenesis. The absence of PDI can lead to spermatogenesis disorders in mice, including testicular atrophy, azoospermia, and complete infertility. Additionally, PDI is involved in the activity of chaperone proteins, aiding in the correct folding and degradation of proteins by regulating their redox state. Beyond catalyzing the formation and isomerization of disulfide bonds, PDI also plays a role in redox reactions. For instance, it helps regulate intracellular redox balance through interactions with glutathione (GSH) and oxidized glutathione (GSSG).

Target/Biomarker	Mouse PDI
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Target Synonym P4HB; ERBA2L; PDIA1; PO4DB; PROHB; DSI; GIT; PDI; PO4HB; P4Hbeta; Prolyl 4-Hydroxylase Subunit Beta; Procollagen-Proline 2-Oxoglutarate 4-Dioxygenase Beta Polypeptide

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## Shipping and Storage

This product is shipped with gel ice packs. It is recommended to store at 2-8 °C (Up to 6 months).

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The product is for research use only. Not for commercial, prophylactic, diagnostic, or therapeutic applications. Please determine the purpose of the product before purchasing. For further information and inquiry, please contact us.