

## 32-6874: PDIA3 Mouse

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| <b>Application :</b>      | Functional Assay   |
| <b>Alternative Name :</b> | ERp57, ERp60, ERp61, GRP57, GRP58, HsT17083, P58, PI-PLC, ER60, Protein disulfide-isomerase A3, Disulfide isomerase ER-60, Endoplasmic reticulum resident protein 60, ER protein 60, 58 kDa microsomal protein, Endoplasmic reticulum resident protein 57, ER protein 57, 58 kDa glucose-regulated protein, PDIA3. |

### Description

Source: Escherichia Coli.

Sterile filtered colourless solution.

PDIA3 is an enzyme that belongs to the endoplasmic reticulum and interacts with lectin chaperones calreticulin and calnexin to modulate folding of newly synthesized glycoproteins. PDIA3 has protein disulfide isomerase activity. Complexes of lectins and PDIA3 mediate protein folding by promoting formation of disulfide bonds in their glycoprotein substrates. PDIA3 is expressed in the lumbar spinal cord from rats submitted to peripheral lesion during neonatal period. PDIA3 interacts with thiazide-sensitive sodium-chloride cotransporter in the kidney and is induced by glucose deprivation. PDIA3 is part of the major histocompatibility complex (MHC) class I peptide-loading complex (TAP1), which is important for formation of the final antigen conformation and export from the endoplasmic reticulum to the cell surface.

PDIA3 Mouse Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 505 amino acids (25-505 a.a) and having a molecular mass of 56.8kDa. PDIA3 is fused to a 23 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques.Å

### Product Info

|                            |   |
|----------------------------|---|
| <b>Amount :</b>            | 2 µg / 10 µg  |
| <b>Purification :</b>      | Greater than 95.0% as determined by SDS-PAGE.   |
| <b>Content :</b>           | PDIA3 protein solution (1mg/ml) containing 20 mM Tris-HCl buffer (pH8.0), 1mM DTT, 0.1M NaCl and 10% glycerol .   |
| <b>Storage condition :</b> | Store at 4°C if entire vial will be used within 2-4 weeks.Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Avoid multiple freeze-thaw cycles.  |
| <b>Amino Acid :</b>        | MGSSHHHHHH SSGLVPRGSH MGSMSDVLEL TDENFESRVS DTGSAGLMLV EFFAPWCGHC<br>KRLAPEYEAA ATRLKGIVPL AKVDCTANTN TCNKYGVSGY PTLKIFRDGE EAGAYDGPRT ADGIVSHLKK<br>QAGPASVPLR TEEEFKKFIS DKDASVVGFF RDLFSDGHSE FLKAASNLRD NYRFAHTNIE SLVKEYDDNG<br>EGITIFRPLH LANKFEDKTV AYTEKKMTSG KIKKFIQDSI FGLCPHMTED NKDLIQGKDL LTAYYDV DYE<br>KNAKGSNYWR NRVMMVAKKF LDAGHKLNFA VASRKTFSHE LSDFGLESTT GEVPVVAIRT<br>AKGEKFVMQE EFSRDGKALE QFLQEYFDGN LKRYLKSEPI PESNEGPVKV VVAENFDDIV NEEDKDV LIE<br>FYAPWCGHCK NLEPKYKELG EKLSKDPNIV IAKMDATAND VSPSYEVKGF PTIYFSPANK KLTPKKYEGG<br>RELNDFISYL QREATNPPII QEEKPKKKKK AQEDL. |

### Application Note

Specific activity is >15 A650/cm/min/mg,obtained by measuring the increase of insulin precipitation in absorbance at 650nm resulting from the reduction of insulin.