

## Human Protein Disulfide-Isomerase, P4HB ELISA Kit | P4HB elisa kit

Human Protein Disulfide-Isomerase, P4HB Primacu ELISA Kit

CATALOG #  
**AAA124207**

REACTIVITY  
**Human**

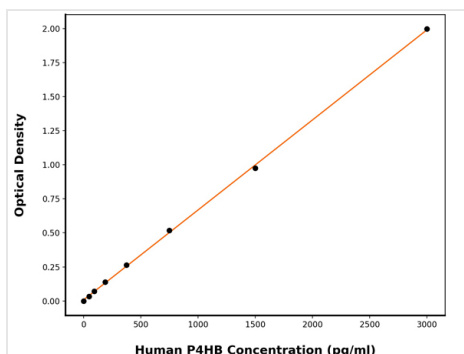
### PRODUCT SYNONYMS

Protein Disulfide-Isomerase; P4HB; Human Protein Disulfide-Isomerase; P4HB Primacu ELISA Kit; Protein disulfide-isomerase; ERBA2L; PDI; PDIA1; PO4DB; P4HB elisa kit

### PRODUCT SPECIFICATIONS

|                         |                                        |
|-------------------------|----------------------------------------|
| Reactivity              | Human                                  |
| Assay Type              | Sandwich                               |
| Samples                 | Serum, plasma, cell culture supernates |
| Detection Range         | 47-3000pg/mL                           |
| Sensitivity             | 21.08pg/mL                             |
| Standard Solution       | 30ng/mL                                |
| Assay Time              | 3.5h                                   |
| Preparation and Storage | Store at 2-8 degree C                  |

### IMAGES



Standard Curve (Sample)

Typical Testing Data/Standard Curve (for reference only)

ADDITIONAL INFORMATION

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| Related Product Information for P4HB elisa kit | Protein disulfide-isomerase, also known as Cellular thyroid hormone-binding protein, Prolyl 4-hydroxylase subunit beta, p55 and P4HB, is a peripheral membrane protein that belongs to the protein disulfide isomerase family. P4HB is highly abundant. In some cell types, it seems to be also secreted or associated with the plasma membrane, where it undergoes constant shedding and replacement from intracellular sources. P4HB localizes near CD4-enriched regions on lymphoid cell surfaces. It is identified by mass spectrometry in melanosome fractions from stage I to stage IV. P4HB reduces and may activate fusogenic properties of HIV-1 gp12 surface protein, thereby enabling HIV-1 entry into the cell. P4HB catalyzes the formation, breakage and rearrangement of disulfide bonds. At the cell surface, it seems to act as a reductase that cleaves disulfide bonds of proteins attached to the cell. P4HB may therefore cause structural modifications of exofacial proteins. Inside the cell, it seems to form/rearrange disulfide bonds of nascent proteins. At high concentrations, P4HB functions as a chaperone that inhibits aggregation of misfolded proteins. At low concentrations, it facilitates aggregation (anti-chaperone activity). P4HB may be involved with other chaperones in the structural modification of the TG precursor in hormone biogenesis. It also acts as a structural subunit of various enzymes such as prolyl 4-hydroxylase and microsomal triacylglycerol transfer protein MTTP. |
| Product Categories/Family for P4HB elisa kit   | Primacu ELISA Kit; Cancer; Metabolism; Signal transduction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                                                                                                                                                                                 |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 20070125                                                                                                                                                                                                                                                        |
| NCBI GeneID                      | 5034                                                                                                                                                                                                                                                            |
| NCBI Accession #                 | NP_000909.2                                                                                                                                                                                                                                                     |
| NCBI GenBank Nucleotide #        | NM_000918.3                                                                                                                                                                                                                                                     |
| UniProt Accession #              | P07237; P30037; P32079; Q15205; Q6LDE5; B2RDQ2                                                                                                                                                                                                                  |
| Molecular Weight                 | 508                                                                                                                                                                                                                                                             |
| NCBI Official Full Name          | protein disulfide-isomerase                                                                                                                                                                                                                                     |
| NCBI Official Synonym Full Names | prolyl 4-hydroxylase, beta polypeptide                                                                                                                                                                                                                          |
| NCBI Official Symbol             | P4HB                                                                                                                                                                                                                                                            |
| NCBI Official Synonym Symbols    | DSI; GIT; PDI; PHDB; PDIA1; PO4DB; PO4HB; PROHB; ERBA2L; P4Hbeta                                                                                                                                                                                                |
| NCBI Protein Information         | protein disulfide-isomerase; p55; protocollagen hydroxylase; prolyl 4-hydroxylase subunit beta; collagen prolyl 4-hydroxylase beta; thyroid hormone-binding protein p55; glutathione-insulin transhydrogenase; cellular thyroid hormone-binding protein; protei |
| UniProt Protein Name             | Protein disulfide-isomerase                                                                                                                                                                                                                                     |
| UniProt Gene Name                | P4HB                                                                                                                                                                                                                                                            |
| UniProt Synonym Gene Names       | ERBA2L; PDI; PDIA1; PO4DB; PDI                                                                                                                                                                                                                                  |
| UniProt Entry Name               | PDIA1_HUMAN                                                                                                                                                                                                                                                     |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/human-elisa-kits/protein-disulfide-isomerase-p4hb/124207>