

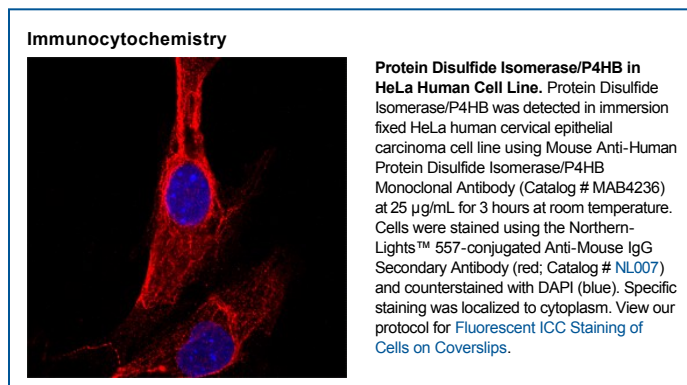
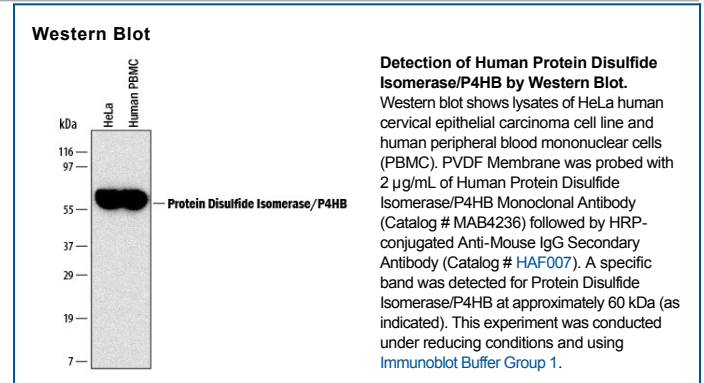
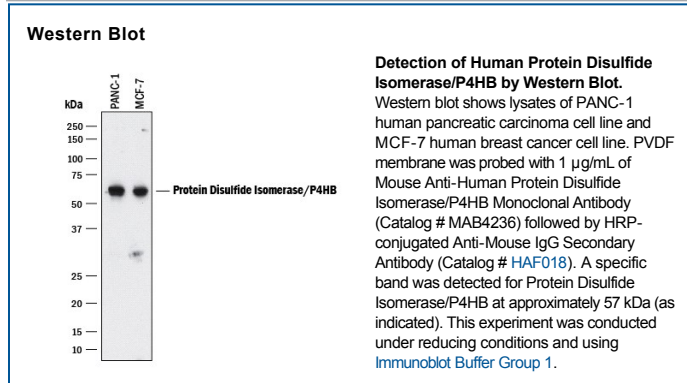
DESCRIPTION	
Species Reactivity	Human
Specificity	Detects human Protein Disulfide Isomerase/P4HB in direct ELISAs and Western blots.
Source	Monoclonal Mouse IgG _{2A} Clone # 537331
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human Protein Disulfide Isomerase/P4HB Asp18-Lys505 Accession # P07237
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	1-2 µg/mL	See Below
Immunocytochemistry	8-25 µg/mL	See Below
Immunoprecipitation	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Human P4HB (Catalog # 4236-D1), see our available Western blot detection antibodies

DATA



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

P4HB (Prolyl 4-hydroxylase beta chain; also PDI) is a 60 kDa member of the protein disulfide isomerase family. As an intracellular homodimer, it forms a tetrameric complex with P4H alpha chains to form an active prolyl 4-hydrolyase. This catalyses the hydroxylation of proline in collagen. On the cell surface, it reduces disulfide bonds in HIV that allow the virus to fuse with CXCR4 and enter susceptible cells. Mature human P4HB is 491 amino acids (aa) in length. It contains two TRX domains (aa 25-134 and 368-475) plus an ER retention sequence (aa 505-508). There is one potential isoform that shows an 11 aa substitution for the first 162 amino acids. Over aa 18-505, human P4HB shares 94% aa identity with mouse P4HB.