Human Protein Disulfide Isomerase/P4HB Biotinylated Antibody

Monoclonal Mouse IgG_{2A} Clone # 537331

Catalog Number: BAM4236

DESCRIPTION

Species Reactivity	Human
Specificity	Conjugated Protein Disulfide Isomerase/P4HB antibodies are ideal for immunocytochemistry colocalization studies in the lumen of the endoplasmic reticulum. The unconjugated antibody 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 BSA as a carrier protein. See Certificate of Analysis for details.

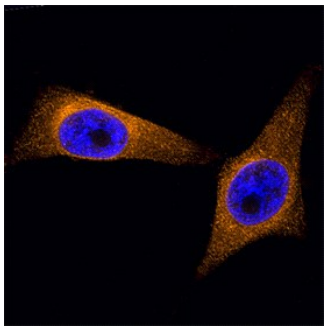
APPLICATIONS

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
Immunocytochemistry	8-25 µg/mL	See Below

DATA

Immunocytochemistry



Protein Disulfide Isomerase/P4HB in HeLa Human Cell Line. Protein Disulfide Isomerase/P4HB was detected in formaldehyde fixed HeLa human cervical epithelial carcinoma cell line using Mouse Anti-Human Protein Disulfide Isomerase/P4HB Biotinylated Monoclonal Antibody (Catalog # BAM4236) at 25 µg/mL overnight at 4 ° C. Cells were stained using the NorthernLights™ 557-conjugated Streptavidin (orange; Catalog # NL999) and counterstained with DAPI (blue). Specific staining was localized to the endoplasmic reticulum. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 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.

bio-techne
bio-techne.com
Global info@bio-techne.com techsupport@bio-techne.com
North America TEL 800 343 7475 Europe | Middle East | Africa TEL +44 (0)1235 529449
China info.cn@bio-techne.com TEL +86 (21) 52380373
Rest of World bio-techne.com/find-us/distributors TEL +1 612 379 2956