

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Protocadherin-15 in direct ELISAs.
Source	Monoclonal Mouse IgG _{2B} Clone # 740523
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human Protocadherin-15 Tyr28-Ala1376 Accession # Q96QU1
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.

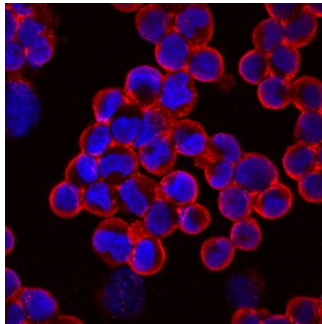
APPLICATIONS

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
Immunocytochemistry	8-25 µg/mL	See Below

DATA

Immunocytochemistry



Protocadherin-15 in YT Human Cell Line.

Protocadherin-15 was detected in immersion fixed YT human leukemia natural killer-like cell line using Mouse Anti-Human Protocadherin-15 Monoclonal Antibody (Catalog # MAB6729) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

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

Protocadherin-15 (PCDH-15) is a 250-270 kDa "other" member of the nonclustered group of the protocadherin family of molecules. In the adult, it is expressed on the base of hair cell stereocilia in the Organ of Corti, on cerebellar granule cells, and on rod and cone photoreceptors. In the ear, it is expressed as a homodimer, and binds (in trans) to cadherin 23 homodimers on adjacent stereocilia. Mature human PCDH-15 is a type I transmembrane protein that is 1929 amino acids (aa) in length. It contains a 1350 aa extracellular domain (ECD) (aa 27-1376) plus a 558 aa cytoplasmic region. There are 11 cadherin domains in the ECD (aa 40-1259). Multiple splice forms are reported. One is a soluble 110 kDa form that shows a five aa substitution for aa 957-1955. Another contains a seven aa substitution for aa 1119-1125. Others show substitutions or deletions in either the extracellular or cytoplasmic domains. Over aa 27-1376 (the ECD), human PCDH-15 shares 95% aa sequence identity with mouse PCDH-15.