

DESCRIPTION

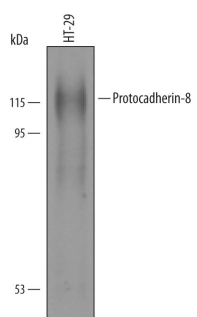
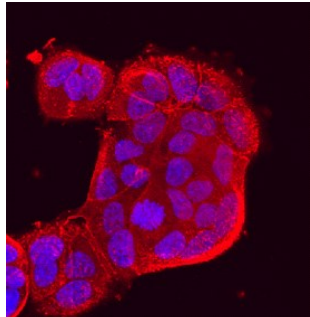
Species Reactivity	Human
Specificity	Detects human Protocadherin-8 in direct ELISAs and Western blots. In direct ELISAs, less than 2% cross-reactivity with recombinant human Protocadherin-10 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Protocadherin-8 Lys30-Pro749 Accession # O95206
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 µg/mL	See Below
Immunocytochemistry	5-15 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human Protocadherin-8 by Western Blot. Western blot shows lysates of HT-29 human colon adenocarcinoma cell line. PVDF Membrane was probed with 1 µg/mL of Human Protocadherin-8 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5434) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). A specific band was detected for Protocadherin-8 at approximately 115 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.</p>	<p>Immunocytochemistry</p>  <p>Protocadherin-8 in MCF-7 Human Cell Line. Protocadherin-8 was detected in immersion fixed MCF-7 human breast cancer cell line using Human Protocadherin-8 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5434) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized to cell surfaces and cytoplasm. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.</p>
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PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
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 8 (PCDH-8, Arcadin) is a 110-115 kDa group F member of the protocadherin family of molecules. It is expressed in breast epithelium, the synaptic membranes of neurons, and presumably forms Ca⁺⁺-dependent homophilic complexes. In breast, it is believed to contribute to a stable epithelial architecture, while in brain, it impacts LTP. Mature human PCDH-8 is a type I transmembrane protein that is 1041 amino acids (aa) in length. It contains a 720aa extracellular domain (ECD) (aa 30-749) plus a 300 aa cytoplasmic region. There are six cadherin domains in the ECD (aa 30-723). Multiple splice variants exist. Two show deletions of aa 134-607 and 781-877, respectively, while a third shows a six aa substitution for aa 365-527. Over aa 30-689, human PCDH-8 shares 93% aa identity with mouse PCDH-8.