

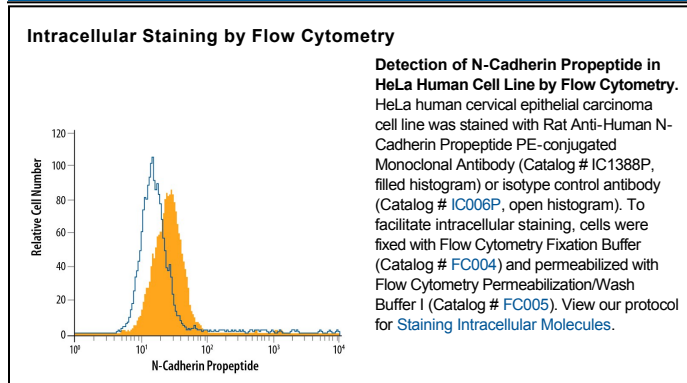
| DESCRIPTION | |
|---------------------------|--|
| Species Reactivity | Human |
| Specificity | Detects human N-Cadherin propeptide in direct ELISAs. Shows no cross-reactivity with recombinant human (rh) Cadherin-4, -6, -8, -11, -12, -13, -17, rhE-Cadherin, rhP-Cadherin and rhVE-Cadherin. |
| Source | Monoclonal Rat IgG _{2A} Clone # 401408 |
| Purification | Protein A or G purified from hybridoma culture supernatant |
| Immunogen | <i>E. coli</i> -derived recombinant human N-Cadherin propeptide Pro26-Lys159 Accession # P10922 |
| Conjugate | Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 nm |
| Formulation | Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

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 |
|---|----------------------------------|-----------|
| Intracellular Staining by Flow Cytometry | 10 μ L/10 ⁶ cells | See Below |

DATA



PREPARATION AND STORAGE

| | |
|--------------------------------|---|
| Shipping | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| Stability & Storage | Protect from light. Do not freeze. ● 12 months from date of receipt, 2 to 8 °C as supplied. |

BACKGROUND

N-Cadherin (Neural Cadherin; also CD325 and Cadherin-2) is a 130–135 kDa member of the "classical" (or type I) cadherin subfamily, cadherin superfamily of proteins. It is expressed on multiple cell types, including neurons, fibroblasts, Schwann cells, endothelial cells and hepatic stellate cells. N-Cadherin mediates homotypic binding, either in cis (same cell) or trans (adjacent cell). proN-Cadherin is expressed as an 881 amino acid (aa) type I transmembrane glycoprotein. It may be initially inserted into the ER, where the 15–20 kDa prodomain (aa 26–159) is cleaved by proprotein convertase, and the mature molecule is transported to the surface. Alternatively, on neurons, proN-Cadherin may first appear on the surface, with cleavage occurring at the time of synaptogenesis. Cleavage appears necessary for homophilic interaction as presence of the prodomain is suggested to negatively regulate oligomer formation. Over the entire prodomain, the human N-Cadherin proregion shares 87% aa identity with the mouse N-Cadherin proregion.