

DESCRIPTION

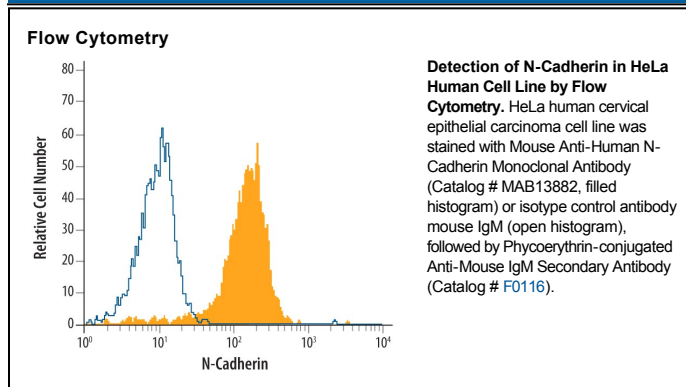
Species Reactivity	Human
Specificity	Detects human N-Cadherin in direct ELISAs. In direct ELISAs, approximately 25% cross-reactivity with recombinant mouse N-Cadherin is observed and no cross-reactivity with recombinant human (rh) E-Cadherin or rhCadherin-4/R-Cadherin is observed.
Source	Monoclonal Mouse IgM Clone # 691701
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human N-Cadherin Ser26-Arg159 Accession # P19022
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
Flow Cytometry	2.5 µg/10 ⁶ cells	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

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

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.