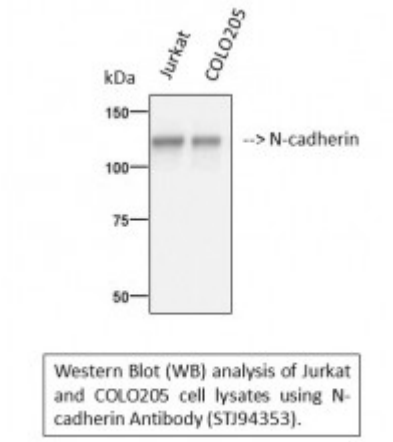
Anti-N-cadherin antibody



Western Blot (WB) analysis of Jurkat and COLO205 cell lysates using N-cadherin Antibody (STJ94353).

Description	N-cadherin is a protein encoded by the CDH2 gene which is approximately 99,8 kDa. N-cadherin is localised to the cell membrane. It is involved in cell junction organization, ERK signalling, blood-brain barrier and immune cell transmigration. It is a calcium-dependent cell adhesion protein. They interact with themselves in a homophilic manner in connecting cells which contribute to the sorting of heterogeneous cell types. It also acts as a regulator of neural stem cells quiescence by mediating anchorage of neural stem cells to ependymocytes in the adult subependymal zone. N-cadherin is expressed in the nervous system, liver, muscle, heart and eye. Mutations in the CDH2 gene may result in malignant pleural mesothelioma and hypoplastic left heart syndrome. STJ94353 was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. This polyclonal antibody detects endogenous levels of N-cadherin protein.

Model	STJ94353
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, IF, IHC, WB
Immunogen	Synthesized peptide derived from human N-cadherin
Immunogen Region	690-770 aa, C-terminal
Gene ID	1000
Gene Symbol	CDH2
Dilution range	WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:10000

Specificity	N-cadherin Polyclonal Antibody detects endogenous levels of N-cadherin protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Cadherin-2 CDw325 Neural cadherin N-cadherin CD antigen CD325
Molecular Weight	130 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:1759OMIM:114020
Alternative Names	Cadherin-2 CDw325 Neural cadherin N-cadherin CD antigen CD325
Function	Cadherins are calcium-dependent cell adhesion proteins. They preferentially interact with themselves in a homophilic manner in connecting cells; cadherins may thus contribute to the sorting of heterogeneous cell types. Acts as a regulator of neural stem cells quiescence by mediating anchorage of neural stem cells to ependymocytes in the adult subependymal zone: upon cleavage by MMP24, CDH2-mediated anchorage is affected, leading to modulate neural stem cell quiescence. CDH2 may be involved in neuronal recognition mechanism. In hippocampal neurons, may regulate dendritic spine density .
Sequence and Domain Family	Three calcium ions are usually bound at the interface of each cadherin domain and rigidify the connections, imparting a strong curvature to the full-length ectodomain. Calcium-binding sites are occupied sequentially in the order of site 3, then site 2 and site 1 .
Cellular Localization	Cell membrane Cell membrane, sarcolemma Cell junction Cell surface. Colocalizes with TMEM65 at the intercalated disk in cardiomyocytes. Colocalizes with OBSCN at the intercalated disk and at sarcolemma in cardiomyocytes.
Post-translational Modifications	Cleaved by MMP24. Ectodomain cleavage leads to the generation of a soluble 90 kDa amino-terminal soluble fragment and a 45 kDa membrane-bound carboxy-terminal fragment 1 (CTF1), which is further cleaved by gamma-secretase into a 35 kDa. Cleavage in neural stem cells by MMP24 affects CDH2-mediated anchorage of neural stem cells to ependymocytes in the adult subependymal zone, leading to modulate neural stem cell quiescence . May be phosphorylated by OBSCN.