

# Rabbit Anti-Human Cadherin 2, type 1, N-cadherin Monoclonal Antibody

**Cat. No.** CAB11508RH    **Lot. No.** (See product label)

## SPECIFICATION

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b>    | Rabbit Monoclonal Antibody to Human Cadherin 2, type 1, N-cadherin                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Species</b>             | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Source</b>              | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Antigen Description</b> | <p>Cadherins are calcium dependent cell adhesion proteins, and they preferentially interact with themselves in a homophilic manner in connecting cells. Human cadherin 2, type 1, N-cadherin (neuronal) (NCAD) , also known as CDH2, is a single-pass transmembrane protein and a cadherin containing 5 cadherin domains. N-cadherin displays a ubiquitous expression pattern but with different expression levels between endocrine cell types. CDH2 (NCAD) has been shown to play an essential role in normal neuronal development, which is implicated in an array of processes including neuronal differentiation and migration, and axon growth and fasciculation. In addition, N-cadherin expression was upregulated in human HSC during activation in culture, and function or expression blocking of N-cadherin promoted apoptosis. During apoptosis, N-cadherin was cleaved into 20-100 kDa fragments. N-cadherin cleavage occurred at a higher level in glioblastoma cells than in non-neoplastic astrocytes.</p> |
| <b>Specificity</b>         | Human N-Cadherin / CD325 / CDH2. No cross-reactivity with human cell lysate ( 293 cell line ) in WB and ELISA.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Immunogen</b>           | Recombinant Human N-Cadherin / CD325 / CDH2 Protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Isotype</b>      | Rabbit IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Clone</b>        | A018                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Applications</b> | WB; ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Dilution</b>     | Western blot: This antibody can be used at 1-2 µg/mL with the appropriate secondary reagents to detect Human CDH2 in WB. Using a DAB detection system, the detection limit for Human CDH2 is approximately 2 ng/lane under non-reducing conditions and 1 ng/lane under reducing conditions. ELISA: This antibody can be used at 0.1-0.2 µg/mL with the appropriate secondary reagents to detect Human CDH2. The detection limit for Human CDH2 is approximately 0.00975 ng/well. |
| <b>Preparation</b>  | This antibody was obtained from a rabbit immunized with purified, human cell-derived, recombinant Human N-Cadherin / CD325 / CDH2                                                                                                                                                                                                                                                                                                                                                |
| <b>Format</b>       | 0.2 µm filtered solution in PBS with 5% trehalose                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Storage</b>      | This antibody can be stored at 2-8 °C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 to -70°C. Preservative-Free. Sodium azide is recommended to avoid contamination (final concentration 0.05%-0.1%). It is toxic to cells and should be disposed of properly. Avoid repeated freeze-thaw cycles.                                                                                    |

## GENE INFORMATION

|                        |                                                                                 |
|------------------------|---------------------------------------------------------------------------------|
| <b>Gene Name</b>       | CDH2 cadherin 2, type 1, N-cadherin (neuronal) [ Homo sapiens ]                 |
| <b>Official Symbol</b> | CDH2                                                                            |
| <b>Synonyms</b>        | CDH2; cadherin 2, type 1, N-cadherin (neuronal); NCAD; cadherin-2; CD325; CDHN; |

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                            | N cadherin; N-cadherin 1; neural cadherin; neural-cadherin; cadherin 2, N-cadherin (neuronal); calcium-dependent adhesion protein, neuronal; CDw325;                                                                                                                                                                                                                                                                                                       |
| <b>Gene ID</b>             | 1000                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>mRNA Refseq</b>         | NM_001792                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Protein Refseq</b>      | NP_001783                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>MIM</b>                 | 114020                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>UniProt ID</b>          | P19022                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Chromosome Location</b> | 18q12.1                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Pathway</b>             | Adherens junctions interactions, organism-specific biosystem; Arrhythmogenic right ventricular cardiomyopathy (ARVC), organism-specific biosystem; Arrhythmogenic right ventricular cardiomyopathy (ARVC), conserved biosystem; CDO in myogenesis, organism-specific biosystem; Cell adhesion molecules (CAMs), organism-specific biosystem; Cell adhesion molecules (CAMs), conserved biosystem; Cell junction organization, organism-specific biosystem; |
| <b>Function</b>            | RPTP-like protein binding; alpha-catenin binding; beta-catenin binding; calcium ion binding; gamma-catenin binding; protein kinase binding; protein phosphatase binding;                                                                                                                                                                                                                                                                                   |