



Recombinant Protein Technical Manual
Recombinant Human Cadherin2/CDH12 Protein (His
Tag)
RPES4481

Product Data:

Product SKU: RPES4481

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_001783.2

Protein Information:

Molecular Mass: 66 kDa

AP Molecular Mass: 80-85 kDa

Tag: C-His

Bio-activity:

Purity: > 80 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile 50mM sodium citrate, 50mM NaCl, 2mM CaCl₂, pH 6.0

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: CDHB

Immunogen Information:

Sequence: Met 1-Ala 605

Background:

Classic Cadherins represent a family of calcium-dependent homophilic cell-cell adhesion molecules. They confer strong adhesiveness to animal cells when they are anchored to the actin cytoskeleton via their cytoplasmic binding partners, catenins. The cadherin/catenin adhesion system plays key roles in the morphogenesis and function of the vertebrate and invertebrate nervous systems. Furthermore, this system is involved in synaptic plasticity. Recent studies on the role of individual cadherin subtypes at synapses indicate that individual cadherin subtypes play their own unique role to regulate synaptic activities. Type II (atypical) cadherins are defined based on their lack of an HAV cell adhesion recognition sequence specific to type I cadherins. It has been observed that cells containing a specific cadherin subtype tend to cluster together to the exclusion of other types, both in cell culture and during development. Cadherin2 also known as CDH12, is a type II classical cadherin from the cadherin superfamily of integral membrane proteins that mediate calcium-dependent cell-cell adhesion. Cadherin2 appears to be expressed specifically in the brain and its temporal pattern of expression would be consistent with a role during a critical period of neuronal development, perhaps specifically during synaptogenesis.