

Recombinant Human Cadherin-12/CDH12 Protein (His Tag)

Catalog No. PKSH031691

Note: Centrifuge before opening to ensure complete recovery of vial contents.

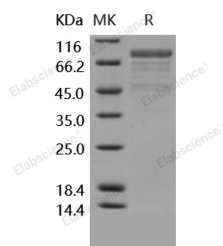
Description

Synonyms	CDHB
Species	Human
Expression Host	HEK293 Cells
Sequence	Met 1-Ala 605
Accession	NP_001304156.1
Calculated Molecular Weight	66.0 kDa
Observed molecular weight	80-85 kDa
Tag	C-His
Bioactivity	Not validated for activity

Properties

Purity	> 80 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, 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 CaCl ₂ , pH 6.0. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 80 % as determined by reducing SDS-PAGE.

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,

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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. Cadherin-12 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. Cadherin-12 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.