Recombinant Protein Technical Manual

Recombinant Human R-Cadherin/CDH4 Protein (His Tag)(Active)

RPES5044

Product Data:

Product SKU: RPES5044

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_001785.2

Protein Information:

Molecular Mass: 80 kDa

AP Molecular Mass: 9000 kDa

Tag: C-His

Bio-activity: Measured by the ability of the immobilized protein to support the adhesion of C6 Rat brain glial cells. Immobilized CAD4 (0.8 µg/ml, 100 µl/well) will mediate >20% C6 cell adhesion.

Purity: > 85 % 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℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.

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

Formulation: Lyophilized from sterile PBS, pH 7.4

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

Application:

Synonyms: CAD4;R-CAD;RCAD

Immunogen Information:

Sequence: Met 1-Ala 734

Background:

The cadherin superfamily is a large family that engage in both homo- and heterotypic, calcium-dependent, cell-cell adhesion events, and can be divided into at least four subfamilies based on the extracellular (EC) regions and cytoplasmic domains, that is: classical cadherins, desmosomal cadherins, protocadherins, and cadherin-like molecules. Human cadherin 4, type 1, R-cadherin (retinal), also known as CDH4, CAD4 and RCAD, is a classical cadherin from the cadherin superfamily. It is a calcium-dependent adhesion molecule and a type I transmembrane glycoprotein composed of five extracellular cadherin repeats, a transmembrane region and a highly conserved cytoplasmic tail. CDH4 is thought to play an important role during brain segmentation and neuronal outgrowth, and also exerts critical actions in kidney and muscle development. CDH4 is expressed in vascular smooth muscle, pancreatic β-cells, thyroid follicular cells, sensory neurons of the dorsal root ganglia, and, possibly, astrocytes and endothelium of the retina. As a classic cadherin, CDH4 forms both homodimers and heterodimers with N-cadherin. The extracellular region of human CDH4 is 96% aa identical to that of mouse CDH4.