

Recombinant Protein Technical Manual Recombinant Mouse Cadherin-6/CDH6 Protein (His Tag) RPES1174

## Product Data:

Product SKU: RPES1174

**Size:** 50µg

Species: Mouse

Expression host: HEK293 Cells

**Uniprot:** P97326

Protein Information:		
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Molecular Mass:	68.7 kDa
AP Molecular Mass:	98 kDa
Tag:	C-His
Bio-activity:	
Purity:	> 90 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU per $\mu g$ of the protein 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 PBS, pH 7.4
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	cad6;cadherin-6;K-cadherin

## Sequence: Met1-Ala615

## Background:

Cadherins are a family of calcium-dependent, cell-cell adhesion molecules that play an important morphoregulatory role in a wide variety of tissues. Alterations in cadherin function have been implicated in tumor progression in a number of adenocarcinomas. Cadherin-6 (CDH6), also known as K-cadherin (KCAD), is a type-II classic cadherin cell-cell adhesion molecules, which are expressed in graded or areal patterns, as well as layer-specific patterns, in the cortical plate. Human Cadherin-6 is synthesized as a 790 aa type I transmembrane glycoprotein that contains a 18 aa signal peptide, a 35 aa propeptide, a 562 aa extracellular region, a 21 aa transmembrane segment, and a 154 aa cytoplasmic domain. There are five cadherin domains of approximately 110 aa each in the extracellular region. Cadherin-6 is highly expressed in brain, cerebellum, and kidney, and may contribute to the formation of the segmental structure of the early brain, as well as the development of renal proximal tubules. Weak expression is also detected lung, pancreas, and gastric mucosa. Additionally, it is specifically expressed in the proximal tubule of normal kidneys and in renal cell cancer. Thus , Cadherin-6 is a new prognostic factor for renal cancer.