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## **Recombinant Human CDH6/K-Cadherin Protein**

Catalog No.: RP00244

Recombinant

## **Sequence Information**

**Species Gene ID Swiss Prot** Human 1004 P55285-1

**Tags** C-His

**Synonyms** CAD6; KCAD; CDH6; KCAD

## **Product Information**

Source HEK293 cells Purification

> 95% by SDS-PAGE.

#### **Endotoxin**

< 0.1 EU/ $\mu g$  of the protein by LAL method.

#### Formulation

Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.Contact us for customized product form or formulation.

#### Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid votex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

#### **Contact**



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## **Background**

CDH6 is 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.

#### **Basic Information**

#### **Description**

Recombinant Human CDH6/K-Cadherin Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Thr 19 - Ala 615 ) of human K-Cadherin (Accession #NP\_004923.1) fused with a  $6\times$ His tag at the C-terminus.

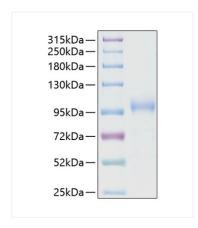
#### **Bio-Activity**

Measured by its binding ability in a functional ELISA. Immobilized Human CDH6 at  $1\mu g/mL$  (100  $\mu L/well$ ) can bind CDH6 Mouse mAb with a linear range of 0.05-6.31 ng/mL.

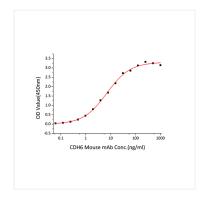
#### Storage

Store the lyophilized protein at -20 °C to -80 °C for long term. <br/> hr> After reconstitution, the protein solution is stable at -20 °C for 3 months, at 2-8 °C for up to 1 week. Avoid repeated freeze/thaw cycles.

## **Validation Data**



Recombinant Human CDH6/K-Cadherin Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 95-100 kDa.



Immobilized Human CDH6 (Catalog: RP00244) at 1 $\mu$ g/mL (100  $\mu$ L/well) can bind CDH6 Mouse mAb with a linear range of 0.05-6.31 ng/mL.