

Human Cadherin-6 / CDH6 Protein (ECD, His Tag)

Catalog Number: 10150-H08H



Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

CAD6; KCAD

Protein Construction:

A DNA sequence encoding the extracellular domain of human CDH6 (NP_004923.1) precursor (Met 1-Ala 615) was fused with a polyhistidine tag at the C-terminus.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: > 85 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Predicted N terminal: Thr 19 & Ser 54

Molecular Mass:

The pro form of recombinant human CDH6 consists of 609 amino acids and predicts a molecular mass of 68 kDa. In SDS-PAGE under reducing conditions, it migrates with the apparent molecular mass of 90-100 kDa due to glycosylation.

Formulation:

Lyophilized from sterile PBS, 0.3M NaCl, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Stability & Storage:

Samples are stable for twelve months from date of receipt at -20°C to -80°C.

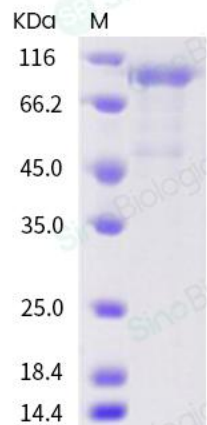
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

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 79 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 11 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.

References

1. Paul R, et al. (1997) Cadherin-6, a cell adhesion molecule specifically expressed in the proximal renal tubule and renal cell carcinoma. *Cancer Res.* 57(13): 2741-8.
2. Paul R, et al. (2004) Cadherin-6: a new prognostic marker for renal cell carcinoma. *J Urol.* 171(1): 97-101.
3. Taniguchi H, et al. (2006) Classic cadherins regulate tangential migration of precerebellar neurons in the caudal hindbrain. *Development.* 133(10): 1923-31.

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