Rat Cadherin-17 / LI-cadherin / CDH17 Protein (His Tag)

Catalog Number: **80283-R08H**

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Biological Solution Specialist

General Information

Gene Name Synonym:

CDH16; HPT-1; HPT1; HPT-1; HPT-1/LI

Protein Construction:

A DNA sequence encoding the rat CDH17 (P55281) (Met1-Met786) was expressed, fused with a polyhistidine tag at the C-terminus.

Source: Rat

Expression Host: Human Cells

QC Testing

Purity: > 81 % as determined by SDS-PAGE

Endotoxin:

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

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Gln 22

Molecular Mass:

The recombinant rat CDH17 comprises 776 amino acids and predicts a molecular mass of 86.4 kDa. The apparent molecular mass of the recombinant protein is approximately 118 kDa in SDS-PAGE under reducing conditions due to glycosylation.

Formulation:

Lyophilized from sterile PBS, 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

Storage:

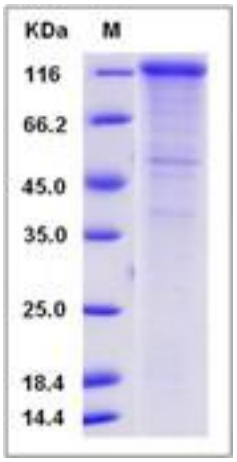
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Cadherin-17 or LI-cadherin is a member of the cadherin superfamily, genes encoding calcium-dependent, membrane-associated glycoproteins. Cadherin-17/LI-cadherin is a cadherin-like protein consisting of an extracellular region, 7 cadherin domains, and a transmembrane region but lacking the conserved cytoplasmic domain. The protein is a component of the gastrointestinal tract and pancreatic ducts, acting as an intestinal proton-dependent peptide transporter in the first step in oral absorption of many medically important peptide-based drugs. The protein may also play a role in the morphological organization of liver and intestine. Alternative splicing of the encoding gene results in multiple transcript variants. Cadherin-17/LI-cadherin preferentially interact with themselves in a homophilic manner in connecting cells. Cadherin-17 may thus contribute to the sorting of heterogeneous cell types and have a role in the morphological organization of liver and intestine. It's also involved in intestinal peptide transport. Experiments have reported the association between Cadherin-17/LI-cadherin and gastric cancer. Cadherin-17/LI-cadherin expression was detected in 63/94 of gastric adenocarcinomas in addition to intestinal metaplasia. The expression of Cadherin-17 tended to be associated with intestinal type carcinoma, and carcinomas with Cadherin-17 expression was significantly more frequent in advanced stage cases than in early stage. Cadherin-17 is also a useful immunohistochemical marker for diagnosis of adenocarcinomas of the digestive system.

References

1.Liu LX, *et al*. (2009) Targeting cadherin-17 inactivates Wnt signaling and inhibits tumor growth in liver carcinoma. Hepatology. 50(5): 1453-63.
2.Ito R, *et al*. (2005) Clinicopathological significant and prognostic influence of cadherin-17 expression in gastric cancer. Virchows Arch. 447(4): 717-22.
3.Horsfield J, *et al*. (2002) Cadherin-17 is required to maintain pronephric duct integrity during zebrafish development. Mech Dev. 115(1-2): 15-26.