Cadherin-13 Protein, Mouse (HEK293, His)

Cat. No.:	HY-P74365
Synonyms:	Cadherin-13; H-cadherin; T-cadherin; T-cad; CDH13
Species:	Mouse
Source:	HEK293
Accession:	Q9WTR5 (M1-A692)
Gene ID:	12554
Molecular Weight:	Approximately 90-110 kDa due to the glycosylation.

PROPERTIES

AA Sequence

D D L E C T P G F Q R K V L H I H Q P A E F I E D Q P V L N L T F N D C K G N E
K L H Y E V S S P H F K V N S D G T L V A L R N I T A V G R T L F V H A R T P H
A E D M A E L V I V G G K D I Q G S L Q D I F K F A R T S P V P R Q K R S I V V
S P I L I P E N Q R Q P F P R D V G K V V D S D R P E G S K F R L T G K G V D Q
D P K G T F R I N E N T G S V S V T R T L D R E T I A T Y Q L Y V E T T D A S G
K T L E G P V P L E V I V I D Q N D N R P I F R E G P Y I G H V M E G S P T G T
T V M R M T A F D A D D P A T D N A L L R Y N I R Q Q T P D K P S P N M F Y I D
P E K G D I V T V V S P A L L D R E T L E N P K Y E L I I E A Q D M A G L D V G
L T G T A T A T I V I D D K N D H S P K F T K K E F Q A T V E E G A V G V I V N
L T V E D K D D P T T G A W R A A Y T I I N G N P G Q S F E I H T N P Q T N E G
M L S V V K P L D Y E I S A F H T L L I K V E N E D P L V P D V S Y G P S S T A
T V H I T V L D V N E G P V F Y P D P M M V T K Q E N I S V G S V L L T V N A T
D P D S L Q H Q T I R Y S I Y K D P A G W L S I N P I N G T V D T T A V L D R E
S P F V H N S V Y T A L F L A I D S G N P P A T G T G T L L I T L E D I N D N A
P V I Y P T V A E V C D D A R N L S V V I L G A S D K D L H P N T D P F K F E I
H K Q T V P D K V W K I S K I N N T H A L V S L L Q N L N K A N Y N L P I M V T
D S G K P P M T N I T D L R V Q V C S C K N S K V D C N G A

Biological Activity	Measured by the ability of the immobilized protein to inhibit the adhesion of HUVEC human umbilical vein endothelial cells. When 5 x 10^4 cells/well are added to Recombinant Mouse Cadherin-13 coated plates, cell adhesion is inhibited in a dose dependent manner after 2.5 hours at 37 °C. The ED_{50} for this effect is 4.025 μg/mL, corresponding to a specific activity is 248.447 units/mg.
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).

Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	Cadherin-13, a calcium-dependent cell adhesion protein, stands out for its unique features in comparison to classical cadherins. Unlike the typical cadherin EC1 domain strand-swapping mechanism for homodimerization, Cadherin-13 achieves this through a distinct homophilic adhesive interface, connecting two elongated EC1-EC2 domains near their Ca2+-binding sites. This arrangement forms a tetrahedral, X-like shape, showcasing a different mode of homodimerization. This protein is implicated in potentially acting as a negative regulator of neural cell growth, and its ability to preferentially interact with itself in a homophilic manner suggests a role in contributing to the sorting of heterogeneous cell types within neural tissues.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA