

Cadherin-1/CD324 Protein, Rat (HEK293, His)

Cat. No.:	HY-P74367
Synonyms:	Cadherin-1; CDH1; CAM 120/80; E-cadherin; CD324
Species:	Rat
Source:	HEK293
Accession:	Q9R0T4 (Q24-A713)
Gene ID:	83502
Molecular Weight:	Approximately 80 kDa due to the glycosylation.

PROPERTIES

AA Sequence

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QP ESESDSCR   PGFSSEVYTF   LVPERHLERG   HILGRVKFEG
CTGRPRTAFF   SEDSRFKVST   DGVITVKRHL   KLHKLETSFL
VHAWDSSYRK   LSTKVTLKSL   GHHHRHHR    DPVSESNPEL
LTFPSFHQGL   RRQKRDWVIP   PINCPENQKG   EFPQRLVQIK
SNRDKETTVF   YSITGPGADK   PPVGVFIIER   ETGWLKVTQP
LDREAIDKYL   LYSHAVSSNG   EAVEDPMEIV   VTVTQDQDNR
PEFIQEVFEG   SVAEGALPGT   SVMQVSATDA   DDDINTYNAA
IAYTILSQDP   ELPHKNMFTV   NRDTGVISVV   TSGLDRESYP
TYTLVVQAAD   LQGEGLSTTA   KAVITVKDIN   DNAPIFNPST
YQGQVLENEV   GARIATLKVT   DDDAPNTPAW   NAVYTVVNDP
DHQFTVITDP   KTNEGILKTA   KGLDFEAKQQ   YILHVTVENE
EPFEGSLVPS   TATVTVDVVD   VNEAPIFVPA   EKREVEVPEDF
GVGLEIASYT   AREPDTFMEQ   KITYRIWRDT   ANWLEINPET
GVI STRAEMD   REDSEHVKNS   TYTALI IATD   DGSPIATGTG
TLLLVLSDVN   DNAPIPEPRN   MQFCQRNPKP   HVITILDPDL
PPNTSPFTA E   LTHGASVNW T   IEYNDAEQES   LILQPRKDLE
IGEYKINLKL   SDNQNKDQVT   TLEVHVCDCE   GTVNNCMKAI
SLEAGLQVPA

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Biological Activity

Measured by the ability of the immobilized protein to support the adhesion of MCF-7 cells. When 5×10^4 cells/well are added to Rat Cadherin-1/CD324 Protein, cell adhesion is enhanced in a dose dependent manner after 30 minutes at 37°C. The ED₅₀ for this effect is 0.3603 µg/mL, corresponding to a specific activity is 2.775×10^3 U/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.

Reconstitution

It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH₂O. 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-1/CD324 protein, a calcium-dependent cell adhesion molecule, plays a pivotal role in various cellular processes. By preferentially interacting with other cadherin molecules of the same type in a homophilic manner, CDH1 contributes to the sorting and organization of different cell types within tissues. Furthermore, it is involved in regulating cell-cell adhesions, mobility, and proliferation of epithelial cells. CDH1 also serves as a ligand for integrin alpha-E/beta-7 and exhibits a potent suppressor role in invasion. Additionally, it promotes the non-amyloidogenic degradation of Abeta precursors and exerts a strong inhibitory effect on the production of APP C99 and C83.

Caution: Product has not been fully validated for medical applications. For research use only.

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