# PRODUCT DATA SHEET



# Complex Biotech Co., Ltd

# **CD325 Recombinant Protein**

Catalog: BCP3459 Host: E.coli Tag: His-tag

#### **BackGround:**

Cadherins are a superfamily of transmembrane glycoproteins that contain cadherin repeats of approximately 100 residues in their extracellular domain. Cadherins mediate calcium-dependent cell-cell adhesion and play critical roles in normal tissue development. The classic cadherin subfamily includes N-, P-, R-, B-, and E-cadherins, as well as about ten other members that are found in adherens junctions, a cellular structure near the apical surface of polarized epithelial cells. The cytoplasmic domain of classical cadherins interacts with  $\beta$ -catenin,  $\gamma$ -catenin (also called plakoglobin), and p120 catenin. β-catenin and  $\gamma$ -catenin associate with  $\alpha$ -catenin, which links the cadherin-catenin complex to the actin cytoskeleton. While βand y-catenin play structural roles in the junctional complex, p120 regulates cadherin adhesive activity and trafficking. Investigators consider E-cadherin an active suppressor of invasion and growth of many epithelial cancers. Research studies indicate that cancer cells have upregulated N-cadherin in addition to loss of E-cadherin. This change in cadherin expression is called the "cadherin switch." N-cadherin cooperates with the FGF receptor, leading to overexpression of MMP-9 and cellular invasion. Research studies have shown that in endothelial cells, VE-cadherin signaling, expression, and localization correlate with vascular permeability and tumor angiogenesis. Investigators have also demonstrated that expression of P-cadherin, which is normally present in epithelial cells, is also altered in ovarian and other human cancers.

#### **Product:**

PBS, 4M Urea, PH7.4

#### **Molecular Weight:**

~62kDa

#### **Swiss-Prot:**

P19022

### **Purification&Purity:**

Transferred into competent cells and the supernatant was purified by NI column affinity chromatography and the purity is > 85% (by SDS-PAGE).

### **Restriction Sites:**

NdeI-XhoI

### Storage&Stability:

Store at  $4\,\mathrm{C}$  short term. Aliquot and store at  $-20\,\mathrm{C}$  long term. Avoid freeze-thaw cycles.

#### **Expression Vector:**

pet-22b(+)

## **DATA:**



## Note:

For research use only, not for use in diagnostic procedure.