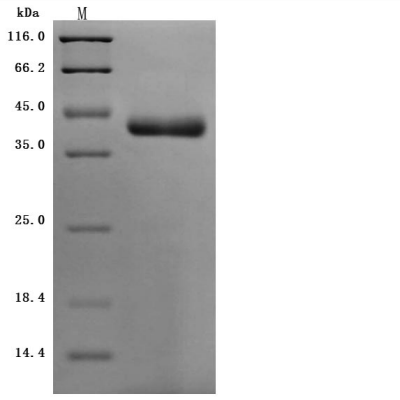
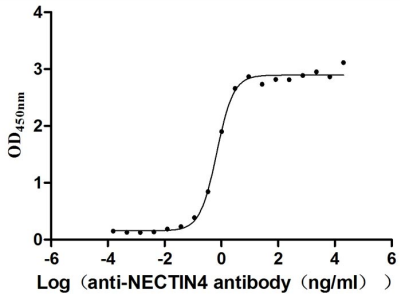
Recombinant Human Nectin-4 (NECTIN4), partial (Active)

Product Code	CSB-MP822274HU
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q96NY8
Form	Lyophilized powder
Storage Buffer	Lyophilized from a 0.2 μm filtered 20 mM Tris-HCl, 0.5 M NaCl, 6% Trehalose, pH 8.0
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Biological Activity	Measured by its binding ability in a functional ELISA. Immobilized NECTIN4 at 2 μg/mL can bind anti-NECTIN4 antibody?CSB-RA822274A0HU??enfortumab vedotin-like?, the EC_{50} is 0.6029-0.7837 ng/mL.
Purity	Greater than 95% as determined by SDS-PAGE.
Sequence	GELETSDVVTVVLGQDAKLPCFYRGDSGEQVGQVAWARVDAGEGAQELALL HSKYGLHVSPAYEGRVEQPPPPRNPLDGSVLLRNAVQADEGEYECRVSTFPA GSFQARLRLRVLVPPLPSLNPGPALEEGQGLTLAASCTAEGSPAPSVTWDTEV KGTTSSRSFKHSRSAAVTSEFHLVPSRSMNGQPLTCVVSHPGLLQDQRITHIL HVSFLAEASVRGLEDQNLWHIGREGAMLKCLSEGQPPPSYNWTRLDGPLPSG VRVDGDTLGFPPLTTEHSGIYVCHVSNEFSSRDSQVTVDVLDPQEDSGKQVD LVSAS
Lead Time	Basically, we can dispatch the products out in 3-7 working days after receiving your orders. Delivery time may differ from different purchasing way or location, please kindly consult your local distributors for specific delivery time.
Research Area	Cell Biology
Source	Mammalian cell
Gene Names	NECTIN4
Expression Region	32-349aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	C-terminal 10xHis-tagged
Mol. Weight	36.9 kDa
Protein Description	Partial
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.



Activity
Measured by its binding ability in a functional ELISA. Immobilized NECTIN4 at 2 μg/ml can bind anti-NECTIN4 antibody?CSB-RA822274A0HU??enfortumab vedotin-like?, the EC_{50} is 0.6029-0.7837 ng/mL.

Description

Co-introduction of the gene encoding the human Nectin-4 (NECTIN4) protein (32-349aa) with the C-terminal 10xHis-tag gene creates a recombinant plasmid, which is then transformed into mammalian cells. Mammalian cells that can endure a specific antibiotic are selected and cultured under conditions that encourage the expression of the gene of interest. Following expression, affinity purification is employed to isolate and purify the recombinant human NECTIN4 protein from the cell lysate. Its purity exceeds 95% and its endotoxin content is less than 1.0 EU/ug. Its activity has been validated through a functional ELISA.

Nectin-4 is a sticky molecule crucial for many cell activities. It's got several parts: a front end with three immunoglobulin-like pieces, a middle part that spans the cell membrane, and a tail that reaches into the cell's interior and hooks up with the cell's structural scaffold, called the actin cytoskeleton [1]. Belonging to the nectin family, it's involved in steering cells in the right direction, controlling how fast they grow, what they turn into, how they move, and whether they invade other tissues [2]. It teams up with a protein called afadin, which latches onto the cell's internal skeleton, to get its job done [3].

Nectin-4 mostly hangs out on tumor cells, which makes it a promising target for cancer treatments that harness the immune system [4]. It's especially abundant in urothelial carcinoma, suggesting it could be a bull's-eye for drugs in this type of cancer [5]. In some types of thyroid cancer, it's been tagged as a gene that helps tumors grow and spread [6]. It's even involved in the growth of new blood vessels, a process called angiogenesis, via a signaling pathway involving Src, making it a potential target in cancers like angiosarcoma [2]. And it's not just cancers - it's also a doorway for viruses like measles to invade cells [7][8][9][10][11]. Plus, it might have a role in a serious pregnancy complication

called pre-eclampsia, and it's found in the skin, esophagus, bladder, and placenta tissues [12]. Lastly, it has been linked to the spread of cancer to other parts of the body and putting the brakes on the immune system in ovarian cancer [13].

References:

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Endotoxin	Less than 1.0 EU/ug as determined by LAL method.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.