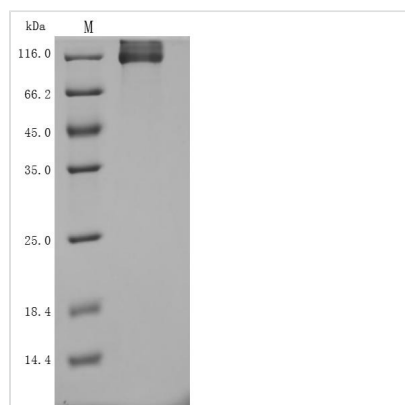


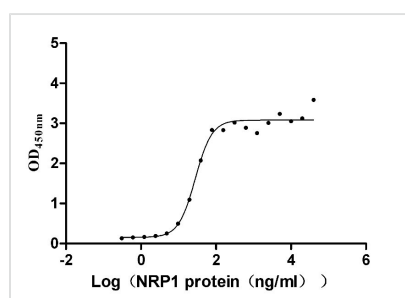


Recombinant Human Neuropilin-1 (NRP1) (Active)

Product Code	CSB-MP016091HU
Abbreviation	Recombinant Human NRP1 protein (Active)
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.	O14786
Form	Lyophilized powder
Storage Buffer	Lyophilized from a 0.2 µm filtered PBS, 6% Trehalose, pH 7.4
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Biological Activity	Measured by its binding ability in a functional ELISA. Immobilized human VEGF165 (CSB-MP025833HU(F4)) at 2 µg/ml can bind human NRP1, the EC ₅₀ is 22.68-34.55 ng/ml.
Purity	Greater than 95% as determined by SDS-PAGE.
Sequence	FRNDKCGDTIKIESPGYLTSPGYPHSYHPSEKCEWLIQAPDPYQRIMINFNPHF DLED RDCKYDYVEVFDGENENGHFRGKFCGKIAPPPVVSSGPFLFIKFVSDYE THGAGFSIRYEIFKRGPECSQNYTTSPSGVIKSPGFPEKYPNSLECTYIVFVPM SEIILEFESFDLEPDSNPPGGMFCRYDRLEIWDGFPDVGPHIGRYCGQKTPGRI RSSSGILSMVFYTDSIAIAKEGFSANYSVLQSSVSEDFKCMEALGMESGEIHSD QITASSQYSTNWSAERSRLNYPENGWTPGEDSYREWIQVDLGLLRFTAVGT QGAISKETKKKYYVKTYKIDVSSNGEDWITIKEGNKPVLFQGNTPDVTAVF PKPLITRFVRIKPATWETGISMRFEVYGCKITDYPSCGMLGMVSGLISDSQITSS NQGDRNWMPENIRLVTSRSGWALPPAPHSYINEWLQIDLGEEKIVRGIIIQGGK HRENKVFMRKFKIGYSNNGSDWKMMIMDDSKRKAKSFEGNNNYDTPELRTFPA LSTRFIRIYPERATHGGLGLRMELLGCEVEAPTAGPTTPNGNLVDECDDDDQAN CHSGTGDDFQLTGTTVLATEKPTVIDSTIQSGIK
Research Area	Cardiovascular
Source	Mammalian cell
Target Names	NRP1
Expression Region	22-644aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	C-terminal hFc1-tagged
Mol. Weight	98.8 kDa
Protein Length	Full Length of Mature Protein of Isoform 2
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 human VEGF165 (CSB-MP025833HU(F4)) at 2 µg/ml can bind human NRP1, the EC₅₀ is 22.68-34.55 ng/ml.

Description

The gene fragment coding for amino acids 22-644 of the human Neuropilin-1 (NRP1) isoform 2 is expressed in mammalian cells with a human Fc tag at the C-terminus. The product is the recombinant human NRP1 protein. This NRP1 protein has been demonstrated to be active. In the functional ELISA, immobilized human VEGF165 can bind to this NRP1 protein. The EC₅₀ is 22.68-34.55 ng/ml. It reaches up to 95% in purity. In the SDS-PAGE, this protein migrated to the band of molecular weight about 116 kDa on the gel. Its endotoxin is less than 1.0 EU/ug determined by the LAL method. This recombinant NRP1 protein is in stock.

NRP1, a member of a family of signaling and catalytic proteins, exists as two isoforms: a secreted form (sNRP1) and a transmembrane form. sNRP1 has been known to suppress cell-associated NRP-1 function in cervical cancer. And patients with cervical cancer have significantly higher circulating sNRP-1 levels. The transmembrane form of NRP1 plays important roles in the development of the nervous and cardiovascular system, tumorigenesis, and viral entry through interaction with VEGF, Sema3A, TGF-β, plexins, and integrins. Studies have demonstrated that NRP1 facilitates SARS-CoV-2 entry into host cells and significantly potentiates SARS-CoV-2 infectivity in vitro. NRP1 thus may potentially provide a therapeutic target for COVID-19.

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.

Shelf Life

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.