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# Produktinformation

- Forschungsprodukte & Biochemikalien
- Zellkultur & Verbrauchsmaterial
- Diagnostik & molekulare Diagnostik
- Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!

## Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

## Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand


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# Recombinant Human Macrophage mannose receptor 1 (MRC1), partial

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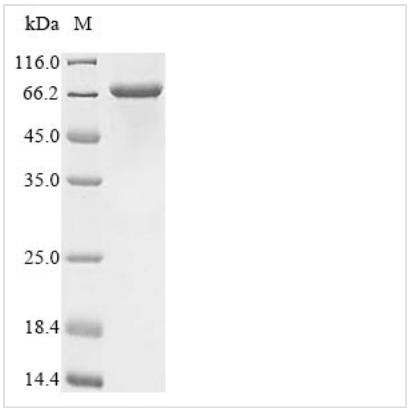
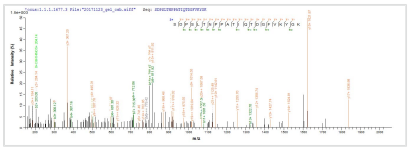
|---|---|
| **Product Code** | CSB-EP014783HUa0 |
| **Relevance** | Mediates the endocytosis of glycoproteins by macrophages. Binds both sulfated and non-sulfated polysaccharide chains. (Microbial infection) Acts as phagocytic receptor for bacteria, fungi and other pathogens. Acts as a receptor for Dengue virus envelope protein E. Interacts with hepatitis B virus envelope protein |
| **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.** | P22897 |
| **Product Type** | Recombinant Protein |
| **Immunogen Species** | Homo sapiens (Human) |
| **Purity** | Greater than 85% as determined by SDS-PAGE. |
| **Sequence** | RTSLCFKLYAKGKHEKKTWFESRDFCRALGGDLASINNKEEQQTIWRLITASG SYHKLFWLGLTYGSPSEGFTWSDGSPVSYENWAYGEPNNYQNVEYCGELKG DPTMSWNDINCEHLNNWICQIQKGQTPKPEPTPAPQDNPPVTEDGWVIYKDY QYYFSKEKETMDNARAFCKRNFGDLVSIQSESEKKFLWKYVNRNDAQSAYFI GLLISLDKKFAWMDGSKVDYVSWATGEPNFANEDENCVTMYSNSGFWNDIN CGYPNAFICQRHNSSINATTVMPTMPSVPSGCKEGWNFYSNKCFKIFGFMEE ERKNWQEARKACIGFGGNLVSIQNEKEQAFLTYHMKDSTFSAWTGLNDVNSE HTFLWTDGRGVHYTNWGKGYPGGRRSSLSYEDADCVVIIGGASNEAGKWMD DTCDSKRGYICQTRSDPSLTNPPATIQTDGFVKYGKSSYSLMRQKFQWHEAE TYCKLHNSLIASILDPYSNAFAWLQMETSNERVWIALNSNLTDNQYTWTDKWR VRYTNWAADEPKLKSACVYLDLDGYWKTAHCNESFYFLCK |
| **Research Area** | Immunology |
| **Source** | E.coli |
| **Target Names** | MRC1 |
| **Protein Names** | C-type lectin domain family 13 member D C-type lectin domain family 13 member D-like Human mannose receptor Short name:hMR Macrophage mannose receptor 1-like protein 1 CD_antigen: CD206 CLEC13D, CLEC13DL, MRC1L1 |
| **Expression Region** | 655-1213aa |
| **Notes** | Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week. |
| **Tag Info** | N-terminal 6xHis-tagged |
| **Mol. Weight** | 69.9 kDa |

**Protein Length** Partial

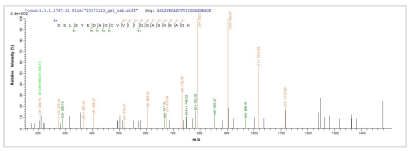
**Image**




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



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-EP014783HUa0 could indicate that this peptide derived from E.coli-expressed Homo sapiens (Human) MRC1.



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-EP014783HUa0 could indicate that this peptide derived from E.coli-expressed Homo sapiens (Human) MRC1.

**Description**

The recombinant human MRC1 is expressed in E.coli. It carries an N-terminal 6xHis-tag. Its expression region corresponds to the 655-1213aa of the human MRC1. Its purity exceeds 85% as measured by SDS-PAGE. The SDS-PAGE experiments showed MRC1's apparent molecular weight to be 66-80 kDa. It is suitable for the MRC1-related immunology research.

Human MRC1, also called CD206, is a type I integral membrane glycoprotein predominantly expressed on macrophages and dendritic cells. It plays a crucial role in the immune response by recognizing and binding to various carbohydrate structures, particularly those containing mannose, fucose, or N-acetylglucosamine.

MRC1 is primarily involved in the endocytosis and phagocytosis of pathogens, such as fungi and bacteria, which display high densities of mannose on their surfaces [1][2]. It also plays a role in clearing glycoproteins and other macromolecules from the extracellular environment, contributing to homeostasis and immune regulation [3][4].

References:
[1] G. Gaziri, L. Gaziri, R. Kikuchi, J. Scanavacca, & I. Felipe, Phagocytosis of candida albicans by concanavalin-a activated peritoneal macrophages, Medical Mycology, vol. 37, no. 3, p. 195-200, 2008. https://doi.org/10.1111/j.1365-280x.1999.00220.x
[2] I. Porcaro, M. Vidal, S. Jouvert, P. Stahl, & J. Gadrey, Mannose receptor

contribution to candida albicans phagocytosis by murine e-clone j774 macrophages, Journal of Leukocyte Biology, vol. 74, no. 2, p. 206-215, 2003. https://doi.org/10.1189/jlb.1202608
[3] S. Swain, S. Lee, M. Nussenzweig, & A. Harmsen, Absence of the macrophage mannose receptor in mice does not increase susceptibility topneumocystis cariniiinfection in vivo, Infection and Immunity, vol. 71, no. 11, p. 6213-6221, 2003. https://doi.org/10.1128/iai.71.11.6213-6221.2003
[4] E. Song, M. Manganiello, Y. Chow, B. Ghosn, A. Convertine, P. Staytonet al., In vivo targeting of alveolar macrophages via raft-based glycopolymers, Biomaterials, vol. 33, no. 28, p. 6889-6897, 2012. https://doi.org/10.1016/j.biomaterials.2012.06.025

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| **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.<br>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. |