

For Research Use Only

Recombinant Mouse MSR1 protein (rFc Tag)



Catalog Number: Eg4727

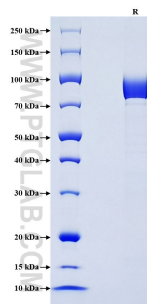
Basic Information	Species: Mouse	Purity: >90 %, SDS-PAGE	Tag: N-rFc
Technical Specifications	Purity: >90 %, SDS-PAGE Endotoxin Level: <0.1 EU/μg protein, LAL method Source: HEK293-derived Mouse MSR1 protein Gln79-Ser458 (Accession# P30204-1) with a rabbit IgG Fc tag at the N-terminus. GeneID: 20288 Accession: P30204-1 Predicted Molecular Mass: 68.8 kDa SDS-PAGE: 75-100 kDa, reducing (R) condition Formulation: Lyophilized from 0.22 μm filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.		
Biological Activity	Not tested		
Storage and Shipping	Storage: It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. • Until expiry date, -20°C to -80°C as lyophilized proteins. • 3 months, -20°C to -80°C under sterile conditions after reconstitution. Shipping: The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.		
Reconstitution	Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.		
Background	Macrophage scavenger receptor 1 (MSR1), also known as Scara1, is a type II transmembrane glycoprotein primarily expressed by microglia in the central nervous system (CNS) of mice. MSR1 plays a significant role in host defense against bacterial infections and has been implicated in the control of viral infections through autophagy. As an important phagocytic receptor, MSR1 can mediate the uptake of a wide range of ligands, including low-density lipoproteins, bacterial pathogens, and dead cells. This function is crucial for the clearance of misfolded protein aggregates, which may include prions, similar to its role in AD with Aβ. MSR1 contributes to inflammatory disorders and cancer. It has been shown to facilitate cellular entry of vesicular stomatitis virus (VSV) in an LDLR family-dependent manner and interacts with VSV glycoprotein G via its extracellular domains. Additionally, MSR1-mediated uptake of saturated fatty acids can activate JNK signaling and induce Tnf-α and IL-6 expression, leading to a phenotype switch from anti-inflammatory to pro-inflammatory.		
References	1. Jack Gudgeon. et al. (2022). Front Immunol. 13:1012002. 2. Long Yang. et al. (2020). Commun Biol. 3(1):556. 3. Bei Li. et al. (2021). J Mol Med (Berl). 99(6):877-887. 4. Duomeng Yang. et al. (2021). iScience. 24(6):102678.		
Synonyms	macrophage scavenger receptor 1		

For technical support and original validation data for this product please contact

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Selected Validation Data



Purity of Recombinant Mouse MSR1 was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) condition and stained using Coomassie blue.