Recombinant Mouse CLEC4F/CLECSF13

Catalog Number: 2784-CL

DESCRIPTION

Source	Mouse myeloma cell line, NS0-derived Ala65-Gly548, with an N-terminal 9-His tag Accession # P70194
N-terminal Sequence Analysis	His
Predicted Molecular Mass	55 kDa

SPECIFICATIONS

SDS-PAGE	65-85 kDa, reducing conditions
Activity	Measured by its ability to bind fluorescein-conjugated *S. aureus* Bioparticles. The ED_{50} for this effect is 0.75-3.75 µg/mL.
Endotoxin Level	<0.10 EU per 1 µg of the protein by the LAL method.
Purity	>85%, by SDS-PAGE under reducing conditions and visualized by silver stain.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 100 µg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 3 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

CLEC4F (C-type lectin domain; family 4, member F; also known as the Kupffer cell receptor and fucose receptor) is an 80 kDa, type II transmembrane glycoprotein member of the C-type lectin superfamily (1 - 3). Mature mouse CLEC4F consists of a 42 amino acid (aa) cytoplasmic domain, a 27 aa transmembrane segment, and a 479 aa extracellular domain (ECD) that contains an extended stalk region plus one carbohydrate recognition domain (4, 5). Within the ECD, mouse CLEC4F shares 48% and 79% aa sequence identity with human and rat CLEC4F, respectively. The stalk region of CLEC4F is a coiled coil domain that mediates homotrimer formation (6, 7). CLEC4F is expressed on Kupffer cells in the liver, but not on macrophages in other tissues (8). CLEC4F preferentially binds galactose and N-acetylgalactosamine in a calcium-dependent manner (6, 9, 10). Its activity at neutral, but not at acidic pH, suggests a capacity to internalize and release ligands into the endosomal system (11).

References:

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