

DESCRIPTION

Source	Mouse myeloma cell line, NS0-derived mouse CLEC4B2/mDCAR1 protein			
	MDP	Mouse IgG _{2A} (Glu98-Lys330)	IEGR	Mouse CLEC4B2 (Gln42-Leu208) Accession # Q67DU8
	N-terminus			C-terminus
N-terminal Sequence	Met			
Analysis				
Structure / Form	Disulfide-linked homodimer			
Predicted Molecular Mass	47 kDa			

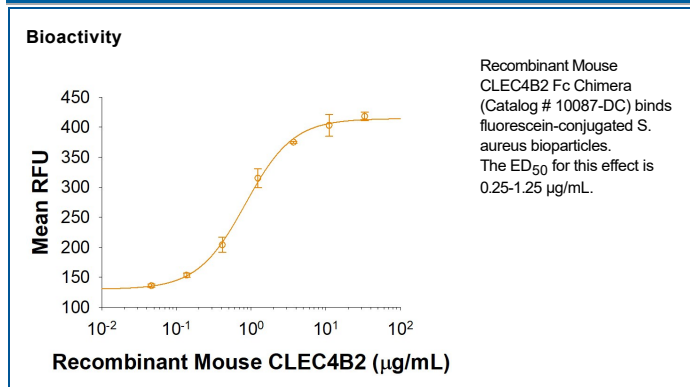
SPECIFICATIONS

SDS-PAGE	50-59 kDa, reducing conditions
Activity	Measured by its ability to bind fluorescein-conjugated <i>S. aureus</i> Bioparticles. Jiang, Y. <i>et al.</i> (2006) <i>J. Biol. Chem.</i> 281 :11834. The ED ₅₀ for this effect is 0.25-1.25 µg/mL.
Endotoxin Level	<0.10 EU per 1 µg of the protein by the LAL method.
Purity	>90%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 500 µg/mL in PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> • 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.

DATA



BACKGROUND

CLEC4B2 (C-type Lectin domain family 4, member b2), also called dendritic cell immunostimulating receptor 1 (DCAR1) and antigen presenting cell lectin-like receptor A1 (APLRA1), is a type II membrane protein belonging to the cell surface C-type lectin domain family (1, 2). Mouse CLEC4B2 is synthesized as a 208 amino acid (aa) precursor that contains a 22 aa transmembrane segment and a 167 aa extracellular domain (ECD) containing a C-type lectin domain. The ECD of mouse CLEC4B2 shares 71% and 50% aa identity with rat CLEC4B2 ECD and human CLEC4B2 ECD, respectively. Activation of CLEC4B2 in the epidermis regulates immune defenses. CLEC4B2 potentially has a second role in host defense. CLEC4B2 is specifically required for the innate immune response to fungal infection and wounding and place this GPCR further upstream than any other known component of innate immune recognition and signaling in *C. elegans* epidermis.

References:

1. Flornes, L. M. *et al.* (2004) *Immunogenetics* **56**:506.
2. Kaden, S. A. *et al.* (2009) *J. Immunol.* **183**:5069.
3. Zugasti, O. *et al.* (2014) *Nat. Immunol.* **15**:833.