

DESCRIPTION

Source	Chinese Hamster Ovary cell line, CHO-derived			
	MD	Human IgG ₁ (Pro100-Lys330)	IEGR	Human AICL/CLEC-2B (Lys26-His149) with a Met79Thr substitution Accession # Q92478
	N-terminus			C-terminus

N-terminal Sequence Met Analysis

Structure / Form Disulfide-linked homodimer

Predicted Molecular Mass 41 kDa

SPECIFICATIONS

SDS-PAGE 48-65 kDa, reducing conditions

Activity Measured by its binding ability in a functional ELISA.
When Recombinant Human AICL/CLEC-2B Fc Chimera is coated at 2 µg/mL (100 µL/well), the concentration of Recombinant Human Galectin-1 (Catalog # 1152-GA) that produces 50% optimal binding response is typically 0.6-3 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

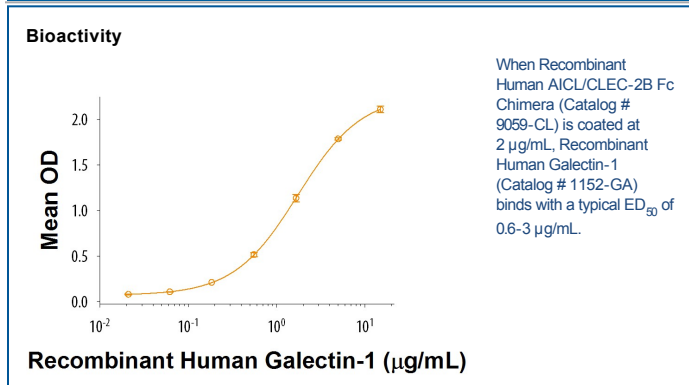
Reconstitution Reconstitute at 500 µg/mL in PBS.

Shipping The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage 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.

DATA



BACKGROUND

Activation-induced C-type lectin (AICL), also known as CLEC2B, is a 30-35 kDa variably glycosylated type-2 transmembrane member of the C-type lectin-like receptor (CTLR) family. AICL belongs to the subgroup of CLEC2 proteins that also includes CLEC2A/KACL, CLEC2D/LLT, and CD69/CLEC2C, all of which are encoded by the natural killer gene complex (1). Human AICL contains a single C-type lectin domain in its extracellular region and a 7 amino acid cytoplasmic tail (2). AICL is expressed on monocytes, macrophages, and granulocytes (3), and it is upregulated on TLR-activated monocytes and IL-12 + IL-18 activated NK cells (3, 4). AICL is an activating receptor that triggers TNF production by monocytes (3). It binds to NKp80 on NK cells, resulting in NK cell mediated lysis of the AICL expressing monocyte (3). In addition, the AICL-NKp80 axis mediates interactions between activated and resting NK cells (4).

References:

1. Li, Y. *et al.* (2014) *Front. Immunol.* **5**:123.
2. Hamann, J. *et al.* (1997) *Immunogenetics* **45**:295.
3. Welte, S. *et al.* (2006) *Nat. Immunol.* **7**:1334.
4. Klimosch, S.N. *et al.* (2013) *Blood* **122**:2380.