

DESCRIPTION

Recombinant Mouse CL-K1/COLEC11

Catalog Number: 4687-CL

| DESCRIPTION | |
|---------------------------------|---|
| Source | Mouse myeloma cell line, NS0-derived Gln27-Leu272, with a C-terminal 6-His tag Accession # Q3SXB8 |
| | Accession # Q35XB8 |
| N-terminal Sequence Analysis | No results obtained: Gln27 predicted |
| Predicted Molecular Mass | 27 kDa |
| SPECIFICATIONS | |
| SDS-PAGE | 33-38 kDa, reducing conditions |
| Activity | Measured by its ability to bind α-L-Fucose. Keshi, H. et al. (2006) Microbiol. Immunol. 50(12):1001. |
| 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 ST | TORAGE |
| 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. |
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BACKGROUND

Collectins constitute a family of C-type lectins that recognize molecular patterns expressed on pathogens. Members of this glycoprotein family contain a N-terminal domain, a collagen-like domain, a neck region, and a C-terminal carbohydrate recognition domain (CRD). Collectins are typically secreted molecules, although CL-P1 is membrane bound and CL-L1 is found in the cytoplasm (1 - 3). Collectin kidney 1 (CL-K1), also known as collectin subfamily member 11 (COLEC11), is a 37 kDa collectin that circulates in the serum (4, 5). It associates into disulfide-linked oligomers and preferentially interacts with fucose residues in a calcium-dependent manner (4). Mature mouse CL-K1 shares 94% and 98% amino acid sequence identity with human and rat CL-K1, respectively. Within the CRD, mouse CL-K1 shares 52% aa sequence identity with CL-L1 and 23% - 32% aa sequence identity with collectins CL-P1, MBL, SP-A, and SP-D.

References:

- 1. Gupta, G. and A. Surolia (2007) Bioessays 29:452.
- 2. van de Wetering, J.K. et al. (2004) Eur. J. Biochem. 271:1229.
- 3. Holmskov, U. et al. (2003) Annu. Rev. Immunol. 21:547.
- 4. Keshi, H. et al. (2006) Microbiol. Immunol. **50**:1001.
- Accession # NP_082142.

