Human B7-H3 (2Ig) / CD276 Protein, His Tag

Catalog # B73-H52E2AI

Application

Human B7-H3 (2Ig) Protein, His Tag AIDD-Ready protein is designed for direct use in SPR assays. It is supplied in a sugar-free, glycerol-free formulation to eliminate refractive index interference in SPR. No desalting or buffer exchange is required before use, simplifying the SPR workflow and supporting high-throughput experimental validation to accelerate the transition from AI prediction to wet-lab validation.

Features and Advantages

- **Directly compatible with SPR:** No desalting or buffer exchange required; supplied as a liquid to reduce sample preparation and improve experimental efficiency.
- **High batch-to-batch consistency:** Each lot is released using SPR QC to ensure experimental reproducibility.
- **Validated with representative drugs:** SPR binding activity is validated using representative drug antibodies to ensure suitability for drug screening and evaluation.

Synonyms

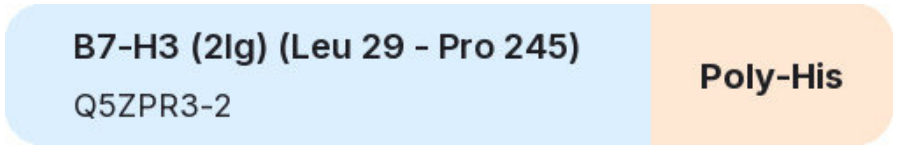
B7-H3, CD276, B7 homolog 3

Source

Human B7-H3 (2Ig) Protein, His Tag (B73-H52E2AI) is expressed from human 293 cells (HEK293). It contains AA Leu 29 - Pro 245 (Accession # Q5ZPR3-2).

Predicted N-terminus: Leu 29

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 25.2 kDa. The protein migrates as 30-43 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-HPLC.

Formulation

Formulated in a proprietary trehalose-free buffer, supplied ready-to-use for SPR/BLI analysis - no buffer exchange required.

For detailed formulation, please refer to the batch-specific COA.

Shipping and Storage

This product is supplied and shipped on dry ice.

Please avoid repeated freeze-thaw cycles.

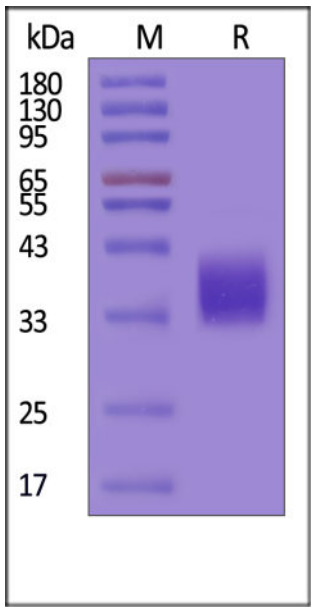
This product is stable after storage at:

- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 12 months under sterile conditions.

ACRO Quality Management System

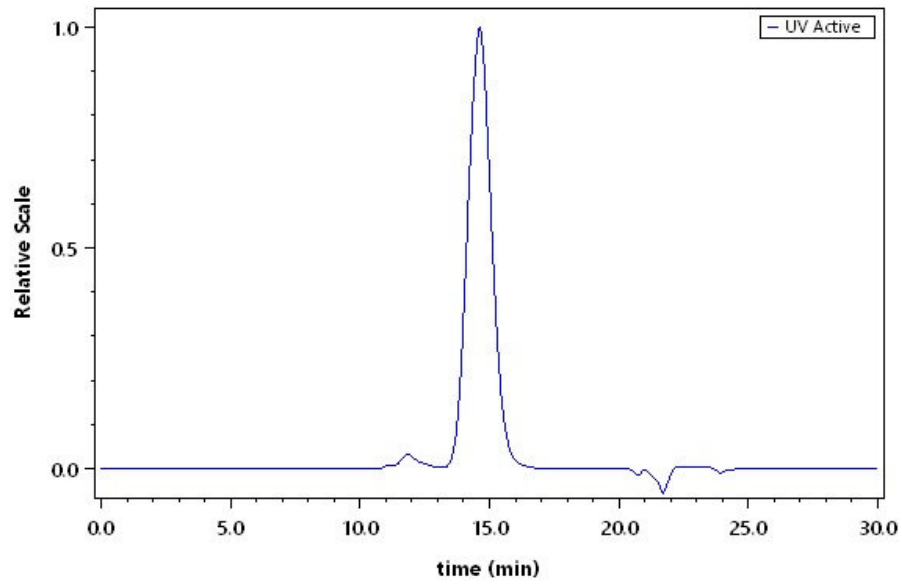
- QMS(ISO, GMP)
- Quality Advantages
- Quality Control Process

SDS-PAGE



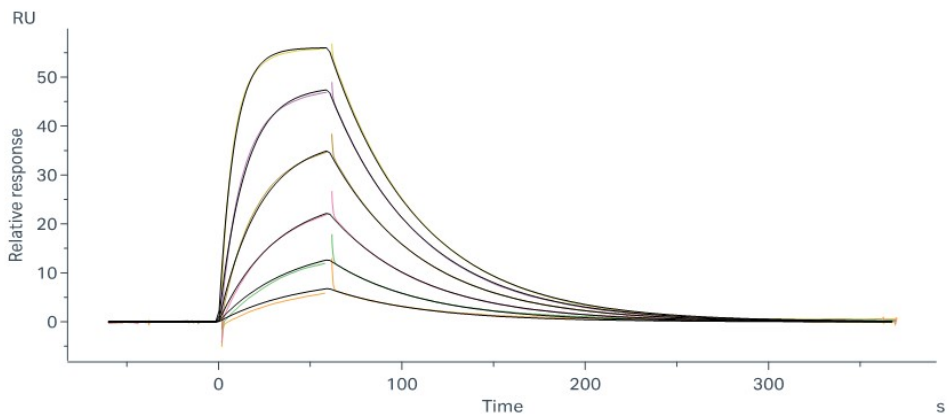
Human B7-H3 (2Ig) Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

SEC-HPLC



The purity of Human B7-H3 (2Ig) Protein, His Tag (Cat. No. B73-H52E2AI) was greater than 90% as determined by SEC-HPLC.

Activity-SPR



Monoclonal Anti-Human B7-H3 / B7-H3 (4Ig) Antibody, Human IgG1 captured on Protein A Chip can bind Human B7-H3 (2Ig) Protein, His Tag (Cat. No. B73-H52E2AI) with an affinity constant of 196 nM as determined in a SPR assay (Biacore 8K) (QC tested).

Background

B7 homolog 3 (B7-H3), a member of the immunoglobulin superfamily, is also known CD276, which contains two Ig-like C2-type (immunoglobulin-like) domains and two Ig-like V-type (immunoglobulin-like) domains. B7-H3 may participate in the regulation of T-cell-mediated immune response. B7-H3 also plays a protective role in tumor cells by inhibiting natural-killer mediated cell lysis as well as a role of marker for detection of neuroblastoma cells. Furthermore, B7-H3 is involved in the development of acute and chronic transplant rejection and in the regulation of lymphocytic activity at mucosal surfaces. It could also play a key role in providing the placenta and fetus with a suitable immunological environment throughout pregnancy.