Anti-CD123 Antibody, Biotin-Labeled

Catalog: 101733
Lot: 230321

Product Information

Description:	This anti-CD123 antibody is a purified, recombinant human monoclonal antibody that recognizes human CD123. This construct contains an Avi-tag™ in the middle of the Heavy Chain constant region. This recombinant antibody has been tested for specific binding to purified recombinant human CD123 by ELISA.
Background:	CD123, also known as interleukin 3 receptor alpha (IL3Ra), is a transmembrane protein found in pluripotent progenitor cells and involved in hematopoietic lineage differentiation. It can also be found in basophils, plasmacytoid dendritic cells and dendritic cells. CD123 is overexpressed on leukemic hematopoietic stem cells (HSCs), but not normal HSCs. It has been found in acute myeloid and B-lymphoid leukemias, blastic plasmacytoid dendritic neoplasms (BPDCN) and hairy cell leukemia. This expression profile makes CD123 an attractive target in cancer therapy. CAR-Ts and other therapies targeting CD123 are currently being evaluated in clinical trials.
Species:	Human
Isotype:	IgG1
Clonality:	Monoclonal
Concentration:	0.22 mg/ml
Expression System:	HEK293
Purity:	≥90%
Format:	Aqueous buffer solution.
Formulated In:	8 mM phosphate, pH 7.4, 110 mM NaCl, 2.2 mM KCl, and 20% glycerol
MW:	Heavy Chain: 52 kDa; Light Chain: 24 kDa + glycans
Glycosylation:	This antibody runs at a higher MW by SDS-PAGE due to glycosylation.
Label:	This antibody is enzymatically biotinylated using Avi-Tag™ technology. Biotinylation is confirmed to be >90%.
Stability:	At least 12 months at -80°C.
Storage:	-80°C
Instructions for Use:	Thaw on ice and gently mix prior to use. DO NOT VORTEX. Perform a quick spin before opening. Aliquot into small volumes and flash freeze for long term storage. Avoid multiple freeze/thaw cycles.
Assay Conditions:	The antibody was validated by measuring anti-CD123 binding to CD123 antigen by ELISA. CD123, Avi-His-Tag Recombinant (BPS Bioscience #101035) was coated onto a 96-well plate overnight at 4°C (50 µl/well at a concentration of 4 µg/ml in PBS). The plate was washed 3 times with Immuno Buffer 1 (BPS Bioscience #79311) and blocked using 100 µl of Blocking Buffer 2 (BPS Bioscience #79728) for 1 hour at Room Temperature (RT). After removing the blocking buffer, 50 µl/well of purified biotinylated anti-CD123 antibody (BPS Bioscience #101733), serially diluted in Blocking Buffer 2, was added for 30 minutes at RT. After 3 more washes, the plate was incubated with Streptavidin-HRP, washed, and incubated with the Colorimetric HRP substrate. The reaction was stopped, and absorbance was read at 450 nm. The Blank value was subtracted from all values.
Applications:	Useful for binding of CD123 in ELISA and in cellular assays.

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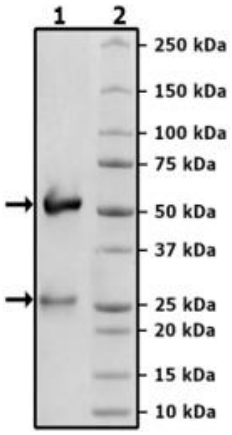
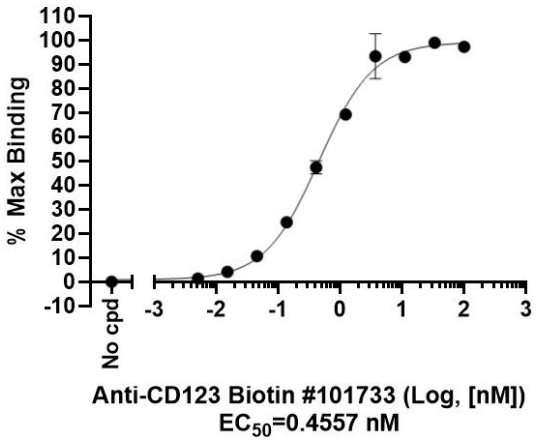
Quality Control Data

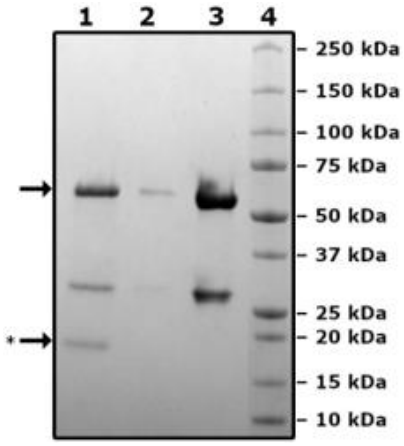
4-20% SDS-PAGE Coomassie Staining



CD123:Anti-CD123 Biotin Binding Assay



Biotin-Avidin Pulldown



1. Beads
2. Flow thru
3. Control
4. Standards

* Avidin from beads.