

# CD126 Monoclonal Antibody (D7715A7), Functional Grade, eBioscience™

Product Details	
Size	500 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Rat / IgG2b
Recommended Isotype Control	Rat IgG2b kappa Isotype Control (eB149/10H5), Functional Grade, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	D7715A7
Conjugate	Functional Grade
Form	Liquid
Concentration	1 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	no preservative
Storage conditions	4° C
RRID	AB_1210681

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	1 µg/test	1 Publication
Neutralization (Neu)	Assay-Dependent	1 Publication
Functional Assay (FN)	Assay-Dependent	-

## Product Specific Information

**Description:** The monoclonal antibody D7715A7 recognizes mouse CD126, the IL-6 receptor alpha chain, a member of the Ig superfamily. CD126 can heterodimerize with CD130 (gp130) to form the high affinity IL-6 receptor. Once IL-6 is bound, signaling from the CD130 subunit is initiated and the receptor complex is internalized. The IL-6 receptor is also reported to exist as a soluble version, which bound to IL-6 acts in trans to signal. Expression is found on T lymphocytes in the periphery and during development in the thymus is restricted to SP populations, unlike gp130 which is expressed in all thymocytes. Additional expression has been shown on activated B lymphocytes, macrophages, granulocytes and CD34+ hematopoietic progenitor cells. The monoclonal antibody D7715A7 binding can be blocked addition of ligand (IL-6).

**Applications Reported:** This D7715A7 antibody has been reported for use in flow cytometric analysis and has also been reported to block cytokine binding and inhibit in vitro and in vivo growth of cells dependent on IL-6.

**Applications Tested:** This D7715A7 antibody has been tested by blocking of direct conjugate when staining mouse splenocytes. This can be used at less than or equal to 1 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is

recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Storage and handling: Use in a sterile environment.

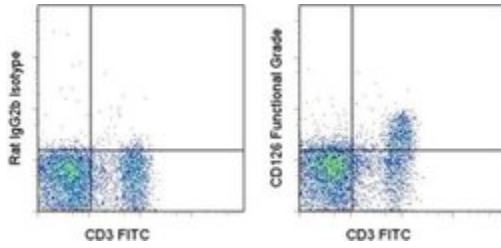
Filtration: 0.2 µm post-manufacturing filtered.

Purity: Greater than 90%, as determined by SDS-PAGE.

Endotoxin Level: Less than 0.001 ng/µg antibody, as determined by LAL assay.

Aggregation: Less than 10%, as determined by HPLC.

## Product Images For CD126 Monoclonal Antibody (D7715A7), Functional Grade, eBioscience™



### CD126 Antibody (16-1261-85) in Flow

Staining of C57Bl/6 splenocytes with Anti-Mouse CD3e FITC (Product # 11-0031-82) and 0.5 µg of Rat IgG2b kappa Isotype Control Purified (Product # 14-4031-82) (left) or 0.5 µg of Anti-Mouse CD126 Functional Grade Purified (right) followed by Anti-Rat IgG Biotin (Product # 13-4813-85) and Streptavidin PE (Product # 12-4317-87). Total viable cells were used for analysis.

## 2 References

### Flow Cytometry (1)

Nature immunology

#### LEF-1 and TCF-1 orchestrate T(FH) differentiation by regulating differentiation circuits upstream of the transcriptional repressor Bcl6.

"16-1261 was used in Flow cytometry/Cell sorting to report that selective loss of Lef1 or Tcf7 results in T(FH) cell defects."

Authors: Choi YS, Gullicksrud JA, Xing S, Zeng Z, Shan Q, Li F, Love PE, Peng W, Xue HH, Crotty S

**Species**  
Mouse

**Dilution**  
Not Cited

**Year**  
2015

### Neutralization (1)

PLoS pathogens

#### TLR4 and NKT cell synergy in immunotherapy against visceral leishmaniasis.

"16-1261 was used in Neutralization experiments to develop a defined, immunotherapeutic strategy for the treatment of immune diseases using a mouse model of visceral leishmaniasis."

Authors: Karmakar S, Bhaumik SK, Paul J, De T

**Species**  
Mouse

**Dilution**  
Not Cited

**Year**  
2012

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