Technical Data Sheet

Purified NA/LE Rat Anti-Mouse CD25

Product Information

Material Number:	**553073**
Alternate Name:	IL-2 Receptor α chain, p55
Size:	0.5 mg
Concentration:	1.0 mg/ml
Clone:	3C7
Immunogen:	IL-2-dependent BALB/c mouse cell line
Isotype:	Rat (LEW) IgG2b, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	No azide/low endotoxin: Aqueous buffered solution containing no preservative, 0.2μm sterile filtered. Endotoxin level is ≤0.01 EU/μg (≤0.001 ng/μg) of protein as determined by the LAL assay.

Description

The 3C7 antibody reacts with CD25, the low affinity IL-2 Receptor (IL-2Rα, p55) expressed on activated T and B lymphocytes from all mouse strains tested. IL-2Rα by itself is not a signaling receptor. However, it can combine with IL-2 Receptor β (CD122) and γc (CD132) chains to form high-affinity, signaling receptor complexes for IL-2. Resting T and B lymphocytes and resting and activated NK cells do not express IL-2Rα. CD25 is transiently expressed at a low level during normal B-cell development in the bone marrow on the CD45R/B220low TdT- sIg- Pre-B/Pre-B-II and CD45R/B220low TdT- sIgM+ sIgD- immature B stages, but not on the CD45R/B220low TdT+ sIg- Pro-B/Pre B-I stage nor on CD45R/B220high TdTsIgM+ sIgD+ mature B cells. It is expressed at a higher level during a very early stage of T-cell development in fetal and adult thymus. Peripheral CD25+ CD4+ T lymphocytes called regulatory T (Treg) cells are involved in the maintenance of self-tolerance. It has also been reported that dendritic cells express CD25, recognized by mAb 7D4 (Cat. No. 553068). The 3C7 antibody recognizes an epitope of CD25 which is distinct from those recognized by mAbs 7D4 and PC61 (Cat. No. 553866), and it blocks binding of IL-2 to CD25.

Preparation and Storage

Store undiluted at 4°C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

This preparation contains no preservatives, thus it should be handled under aseptic conditions.

Application Notes

Application

Flow cytometry	Routinely Tested
Neutralization	Tested During Development
Immunohistochemistry-zinc-fixed	Reported
Immunohistochemistry-frozen	Reported
Blocking	Reported
Immunohistochemistry-formalin (antigen retrieval required)	Not Recommended

Neutralization Activity:

This antibody has been reported to be useful for the neutralization of recombinant mouse IL-2 activity. Investigators are advised that the Neutralization application is not routinely tested for this material. Neutralization activity may be measured with a proliferation assay using 75 pg/mL recombinant mouse IL-2 (Cat. No. 550069) to stimulate CTLL-2 cells at 1x10^5 cells/mL as indicator cells.

50% Neutralization (ND50) at 0.8 - 6 μg/mL

>95% Neutralization at 50 - 300 ug/mL

Recommended Assay Procedure:

Flow cytometry: Investigators may find that for the detection of low-density CD25 expressing cells, PE Rat Anti-Mouse CD25 (Cat. No. 553866) or Biotin Rat Anti-Mouse CD25 (Cat. No. 553069) coupled with a bright second-step reagent, such as PE Streptavidin (Cat. No. 554061), may be helpful.

Immunohistochemistry (IHC): Other reported applications include immunohistochemical staining (IHC) of acetone-fixed frozen and zinc-fixed paraffin-embedded sections. Investigators should note that IHC of formalin-fixed, paraffin-embedded sections is not recommended. For IHC, investigators are encouraged to use Biotin Rat Anti-Mouse CD25 (Cat. No. 550529).

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Suggested Companion Products

Catalog Number	Name	Size	Clone
553866	PE Rat Anti-Mouse CD25	0.2 mg	PC61
554061	PE Streptavidin	0.5 mg	(none)
553069	Biotin Rat Anti-Mouse CD25	0.1 mg	7D4
550529	Biotin Rat Anti-Mouse CD25	1.0 ml	7D4
553985	Purified NA/LE Rat IgG2b, κ Isotype Control	0.5 mg	A95-1
550069	Recombinant Mouse IL-2	20 µg	(none)
553068	Purified Rat Anti-Mouse CD25	0.5 mg	7D4
553864	Purified NA/LE Rat Anti-Mouse CD25	0.5 mg	PC61

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

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