Technical Data Sheet

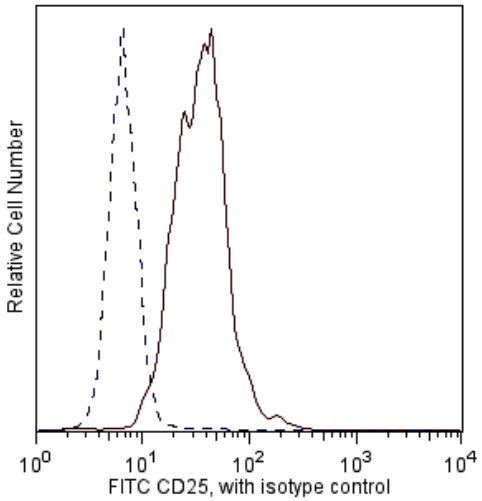
FITC Rat anti-Mouse CD25

Product Information

Material Number:	**558689**
Alternate Name:	IL-2 Receptor α chain, p55
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	3C7
Isotype:	Rat (LEW) IgG2b, κ
Reactivity:	Mouse
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

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.



Flow cytometric analysis of FITC-conjugated anti-mouse CD25 on mouse splenocytes. *Concanavlin A activated murine splenocytes were stained with either FITC anti-CD25(clone 3C7, Cat. No. 558689, solid line) or an FITC rat IgG2b isotype control (catalog number 553988, dashed line) and analyzed by flow cytometry. Flow cytometry was performed on a BD FACSCalibur™ System and the histograms were derived from the gated events based on light scattering characteristics of viable splenocytes.*

Preparation and Storage

The antibody was conjugated with FITC under optimum conditions, and unreacted FITC was removed.
Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application

Flow cytometry	Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
553988	FITC Rat IgG2b, κ Isotype Control	0.25 mg	A95-1

Product Notices

1. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

BD Biosciences

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2. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
3. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
4. Since applications vary, each investigator should titrate the reagent to obtain optimal results.

References

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