

Datasheet: MCA2127SBUV740

BATCH NUMBER 100007617

Description:	MOUSE ANTI HUMAN CD25:StarBright UltraViolet 740
Specificity:	CD25
Other names:	IL-2R ALPHA CHAIN
Format:	StarBright UltraViolet 740
Product Type:	Monoclonal Antibody
Clone:	MEM-181
Isotype:	IgG1
Quantity:	100 TESTS/0.5ml

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species	Human		
Product Form	Purified IgG conjugated to StarBright UltraViolet 740 - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	StarBright UltraViolet 740	344	743
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% Sodium Azide (NaN ₃)		
Stabilisers	1% Bovine Serum Albumin 0.1% Pluronic F68		

0.1% PEG 3350
0.05% Tween 20

Immunogen Human PHA blasts; day 3 of culture.

External Database Links

UniProt:

[P01589](#) [Related reagents](#)

Entrez Gene:

[3559](#) IL2RA [Related reagents](#)

Fusion Partners Spleen cells from immunised BALB/c mice were fused with cells of the mouse P3.X63 Ag8.653 myeloma cell line.

Specificity

Mouse anti Human CD25, clone MEM-181 recognizes the ~55 kDa alpha subunit of the human IL-2 receptor, also known as p55 or TAC antigen, CD25 is a type 1 transmembrane protein with [two Sushi domains](#), also known as short consensus repeats (SCRs) or complement control protein (CCP) modules ([Norman et al. 1991](#)) located within its extracellular domain.

The IL-2 receptor exists in three forms. A high affinity form consisting of a non-covalently linked heterodimer composed of the alpha subunit (CD25) and the IL-2 receptor beta subunit also known as CD122 or p75, a medium affinity beta subunit (CD122) monomer or a low affinity alpha (CD25) subunit monomer.

CD25 is expressed by activated T lymphocytes and activated B lymphocytes responding to antigen or mitogen stimulation. CD25 is also expressed in some thymocytes and oligodendrocytes. In disease, elevated expression of CD25 is noted in a number of chronic inflammatory conditions, tuberculoid leprosy patients demonstrate markedly elevated levels of circulating CD25^{high} FoxP3⁺ regulatory T cells (T-regs) ([Attia et al. 2010](#)).

Elevated levels of CD25 antigen expression are often seen in cases of [non-Hodgkin 's lymphoma](#) and diffuse large B cell lymphoma ([Fujiwara et al.2013](#)).

Flow Cytometry

Use 5µl of the suggested working dilution to label 10⁶ cells in 100µl. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application.

References

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2. Thorborn, G. *et al.* (2010) Increased sensitivity of CD4⁺ T-effector cells to CD4⁺CD25⁺ Treg suppression compensates for reduced Treg number in asymptomatic HIV-1 infection. [PLoS One. 5: e9254.](#)
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13. Luger, R. *et al.* (2013) Toll-like receptor 4 engagement drives differentiation of human and murine dendritic cells from a pro- into an anti-inflammatory mode. [PLoS One. 8 \(2\): e54879.](#)
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Storage

Store at +4°C.
DO NOT FREEZE.
This product should be stored undiluted.

Guarantee

12 months from date of despatch

Acknowledgements

This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts

Health And Safety Information

Material Safety Datasheet documentation #20471 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2127SBUV740>

Regulatory

For research purposes only

Related Products

Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

Product inquiries: www.bio-rad-antibodies.com/technical-support

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M417338:230314'

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