

1B-218-C100

Monoclonal Antibody to CD25 Biotin conjugated (0.1 mg)

Clone:	MEM-181
Isotype:	Mouse IgG1
Specificity:	The antibody MEM-181 reacts with CD25 (Interleukin-2 receptor alpha chain), a 55 kDa type I transmembrane glycoprotein expressed on activated B and T lymphocytes, activated monocytes/macrophages and on CD4+ T lymphocytes (T regulatory cells); it is lost on resting B and T lymphocytes. HLDA VI; WS Code NL N-L024
Immunogen:	PHA-activated peripheral blood leucocytes
Species Reactivity:	Human
Preparation:	The purified antibody is conjugated with Biotin-LC-NHS under optimum conditions. The reagent is free of unconjugated biotin.
Concentration:	1 mg/ml
Storage Buffer:	Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4
Storage / Stability:	Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial label.
Usage:	The reagent is designed for Flow Cytometry analysis. Suggested working dilution is 1:500. Indicated dilution is recommended starting point for use of this product. Working concentrations should be determined by the investigator.
Expiration:	See vial label
Lot Number:	See vial label
Background:	CD25 (IL2Ralpha, Tac) is a ligand-binding alpha subunit of interleukin 2 receptor (IL2R). Together with beta and gamma subunit CD25 constitutes the high affinity IL2R, whereas CD25 alone serves as the low affinity IL2R. CD25 expression rapidly increases upon T cell activation. The 55 kDa CD25 molecule is enzymatically cleaved and shed from the cell surface as a soluble 45 kDa s-Tac, whose concentration in serum can be used as a marker of T cell activation. Expression of CD25 indicates the neoplastic phenotype of mast cells. Humanized anti CD25 antibodies represent a useful tool to reduce the incidence of allograft rejection as well as the severity of graft versus host reaction, and radioimmunoconjugates of anti-CD25 antibodies can be used against CD25 expressing lymphomas.

For laboratory research only, not for drug, diagnostic or other use.



Antibodies

References:

- *Lai KN, Leung JC, Lai FM: Soluble interleukin 2 receptor release, interleukin 2 production, and interleukin 2 receptor expression in activated T-lymphocytes in vitro. *Pathology*. 1991 Jul;23(3):224-8.
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- *Morris JC, Waldmann TA: Advances in interleukin 2 receptor targeted treatment. *Ann Rheum Dis*. 2000 Nov;59 Suppl 1:i109-14.
- *Sotlar K, Horny HP, Simonitsch I, Krokowski M, Aichberger KJ, Mayerhofer M, Printz D, Fritsch G, Valent P: CD25 indicates the neoplastic phenotype of mast cells: a novel immunohistochemical marker for the diagnosis of systemic mastocytosis (SM) in routinely processed bone marrow biopsy specimens. *Am J Surg Pathol*. 2004 Oct;28(10):1319-25.
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- *Drbal K, Moertelmaier M, Holzhauser C, Muhammad A, Fuertbauer E, Howorka S, Hinterberger M, Stockinger H, Schütz GJ: Single-molecule microscopy reveals heterogeneous dynamics of lipid raft components upon TCR engagement. *Int Immunol*. 2007 May;19(5):675-84.

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