

MT204

Chemical Properties

CAS No. :

Formula:

Molecular Weight:

Storage: Store at low temperature
Store at -20°C

Actual storage temperature shall be subject to the COA.

Biological Description

Description	MT204 is a humanized IgG1 antibody inhibitor that targets IL-2 from human and rhesus monkey sources. It prevents soluble IL-2 from binding to the intermediate-affinity IL-2 receptor and blocks IL-2 bound to CD25 from interacting with the high-affinity IL-2 receptor. In rhesus monkey allogeneic skin transplant models, MT204 shows excellent tolerability and potent immunosuppressive activity. With linear pharmacokinetics, a reasonable serum half-life, and signs of good safety and efficacy, MT204 holds promise for use in immunotherapy.
Targets(IC50)	Interleukin
In vitro	MT204 exhibits dose-dependent inhibition of proliferation and IFN- γ secretion in mitogen concavalin A-stimulated rhesus monkey PBMCs at concentrations between 1-100 μ g/mL over a period of 4 days. It blocks IL-2 binding to the high-affinity IL-2 receptor CD25 with a dissociation constant (k_d) of 0.58 nM. MT204 reduces IL-2-induced cell surface expression of IL-4 receptor α subunit (CD124) in CTLL-2 cells in a dose-dependent manner over 5 hours. When exposed for 5 days, MT204 inhibits IL-2-induced proliferation of NKL cells and T cells with IC50 values of approximately 1.3 nM and 0.21 nM, respectively. At sub-nanomolar concentrations, MT204 potently antagonizes downstream signaling of IL-2, significantly reducing pY-STAT3 levels in primary human lymphocytes within 15 minutes of stimulation. Furthermore, MT204 effectively suppresses IL-2-induced proliferation of NKL cells, T cells, and all NK cells, independent of CD25 expression levels, with IC50 values ranging from 0.35-0.36 nM, 0.33 nM, and 0.1-0.13 nM, respectively.
In vivo	MT204 (50 mg/kg, administered intravenously on days 0, 5, and 12, at a rate of 1.5 mL/kg/h over the course of 1 hour) significantly delays rejection in a rhesus monkey allogeneic skin graft model.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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