 Essange Reagents Plesmanlaan 125 1066 CX Amsterdam The Netherlands	Phone: +31 20 4570707 info@essange-reagents.nl www.essange-reagents.com
Anti-Dupilumab antibody	REF M9263
340 version 01 Issued 31-JAN-2025 (en)	RUO-Research Use Only

General Information

Anti-Dupilumab is a chimeric rabbit/mouse anti-idiotypic antibody that specifically targets the human therapeutic antibody Dupilumab. The recombinant antibody consists of rabbit variable domains and mouse constant domains and binds mainly to free Dupilumab in samples.

Dupilumab is a human IgG4/kappa antibody directed to both the interleukin-4 (IL-4) and IL-13 receptors, blocking the receptor signalling pathways⁽¹⁾.

Anti-Dupilumab antibody has been evaluated in ELISA⁽²⁻⁵⁾, other techniques need to be validated by the user. It is recommended to test the antibody by titration of the product in the used technique using appropriate negative/positive controls.

Characteristics

Type: Recombinant antibody

Isotype: Mouse IgG1- κ

Composition

Product: Anti-Dupilumab antibody

Buffer: PBS + 0.01% sodium azide

Concentration: see CoA (search on the website for lot number)

Aliquots: 100 μ g

Abs (280nm) at 0.1%: 1.61

Isoelectric point: pI 6.105

MW : 142.8 kDa

K_d: 154 pM

Preservative: 0.01% sodium azide is used as preservative.

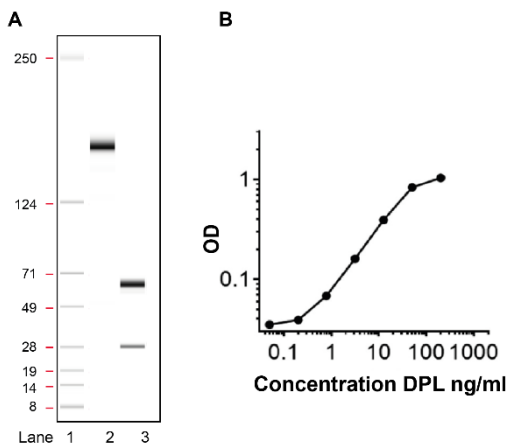


Figure 1 A SDS- PAGE of purified Anti-Dupilumab antibody under non-reducing (lane 2) and reducing (lane 3) conditions. Lane 1 represents the molecular weight marker. *B* Titration of Dupilumab to create pharmacokinetic (PK) curve in bridging ELISA. Anti-Dupilumab antibody was used as capture (0.5 µg/ml) and detection antibody (0.250 µg/ml) in sandwich assay format⁽⁴⁾; DPL= Dupilumab

Precautions and Warnings

For Research Use Only. Not for use in diagnostic procedures. Leaking or damaged vials must not be used. Sodium azide is used as preservative. SDS is available for this product. The reagent cannot be assumed to be free from infectious agents. Waste disposal, after completion of the test, should be performed according to your laboratory regulations.

Storage

This product is shipped and stored at 2- 8°C . Do not freeze.

Publications

- 1 European Medicines Agency (EMA). Dupixent (dupilumab). <https://www.ema.europa.eu/en/medicines/human/EPAR/dupixent>. 2024.
- 2 Bosma AL, Gerbens LAA, El Khattabi H, Loeff FC, Duckworth M, Woolf RT et al. The clinical relevance of dupilumab serum concentration in patients with atopic dermatitis: a two-center prospective cohort study. *Journal of Dermatological Treatment* 2023; 34. PMID:37098906.
- 3 Spekhorst LS, De Graaf M, Loeff F, Zuithoff NPA, Bakker D, Boesjes CM et al. Association of Serum Dupilumab Levels at 16 Weeks with Treatment Response and Adverse Effects in Patients with Atopic Dermatitis: A Prospective Clinical Cohort Study from the BioDay Registry. In: *JAMA Dermatology*. American Medical Association, 2022, pp 1409–1413 PMID:36322072.
- 4 Spekhorst LS, Bakker D, Drylewicz J, Rispens T, Loeff F, Boesjes CM et al. Patient-centered dupilumab dosing regimen leads to successful dose reduction in persistently controlled atopic dermatitis. *Allergy: European Journal of Allergy and Clinical Immunology* 2022; 77: 3398–3407. PMID:35837880.
- 5 Großrichter-Wagener C, Kos D, van Leeuwen A, Dijk L, Jeremiassé J, Loeff FC et al. Biased anti-idiotypic response in rabbits leads to high-affinity monoclonal antibodies to biologics. *MAbs* 2020; 12. PMID:32887534.

Disclaimer

Product Anti-Dupilumab antibody should be stored directly upon arrival, and after use, at 2–8 °C. This product is "FOR RESEARCH USE ONLY", see attachment. Essange Reagents declines all responsibility arising from any deviation thereof.

Changes to Previous Version

This is the first version using template v1.0.