IL-4 Monoclonal Antibody (25D2)

Product Details	
Size	500 µg
Species Reactivity	Human
Published Species	Mouse, Human
Host/Isotype	Rat / IgG1
Class	Monoclonal
Type	Antibody
Clone	25D2
Conjugate	Unconjugated
Immunogen	Recombinant human IL-4 (CHO cell-derived)
Form	Liquid
Concentration	1.0 mg/mL
Purification	Protein G
Storage buffer	PBS
Contains	no preservative
Storage conditions	-20°C
RRID	AB_223568

Applications	Tested Dilution	Publications
Western Blot (WB)	1:1,000	2 Publications
Immunohistochemistry (IHC)	-	2 Publications
Immunocytochemistry (ICC/IF)	-	1 Publication
Flow Cytometry (Flow)	-	12 Publications
ELISA (ELISA)	0.006-25 µg/mL	8 Publications
Neutralization (Neu)	-	1 Publication
Miscellaneous PubMed (Misc)	-	3 Publications

Product Specific Information

M450 targets IL-4 in WB and ELISA applications and shows reactivity with Human samples.

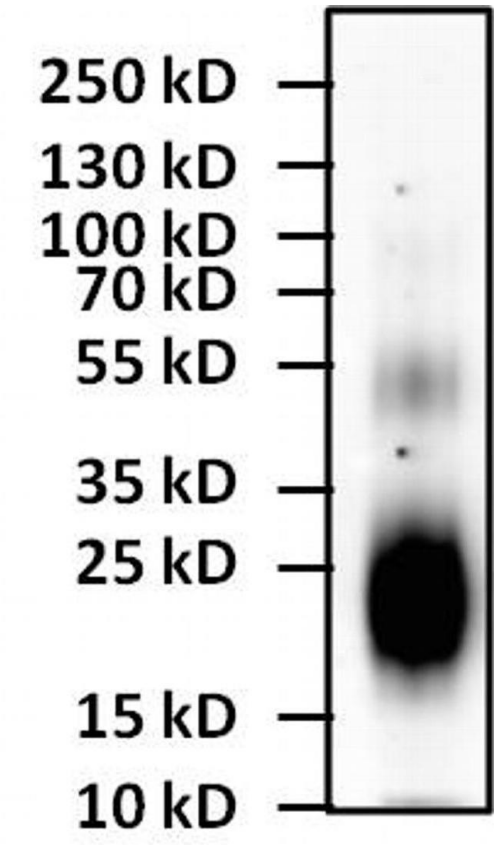
The M450 immunogen is recombinant human IL-4 (CHO cell-derived).

M450 detects IL-4 which has a predicted molecular weight of approximately 15 kDa.

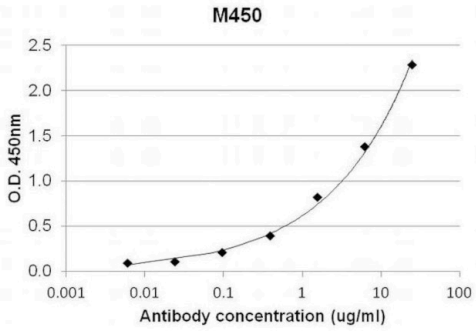
This antibody is produced by injecting Rat IgG secreting hybridoma cells into the peritoneum of mice. The resulting ascites is collected from the mice and the antibody is purified.

This product has been tested for endotoxins by limulus amoebocyte lysate (LAL) assay and contains an endotoxin concentration of less than or equal to 10 endotoxin units per milligram (EU/mg).

Product Images For IL-4 Monoclonal Antibody (25D2)



IL-4 Antibody (M450) in WB
Western blot analysis of IL-4 was performed by loading 1 µg of human recombiannt protein IL-4 (1 µg/lane, Product # RIL4I) in non-reducing sample buffer and 8 µL PageRuler Plus Prestained Protein Ladder (Product # 26619) per well onto a 4-20% Tris-Glycine polyacrylamide gel (Product # WT4202BOX). Proteins were transferred to a nitrocellulose membrane using the G2 Fast Blotter (Product # 62288) and blocked with 5% Milk/TBST for at least 1 hour at room temperature. IL-4 was detected using a IL-4 rat monoclonal antibody (Product # M450) at a dilution of 1:1000 in blocking buffer overnight at 4°C on a rocking platform, followed by a HRP conjugated secondary antibody (Product # 62-9520) at a dilution of 1:5000 for at least 1 hour at room temperature. Chemiluminescent detection was performed using SuperSignal West Dura Extended Duration Substrate (Product # 34076) and the myECL Imager (Product # 62236).



IL-4 Antibody (M450) in ELISA
Direct ELISA analysis of IL-4 was performed by coating wells of a 96-well plate with 100 µL per well of IL-4 (Product # RIL4I) diluted in carbonate/bicarbonate buffer (Product # 28382) at a concentration of 1 µg/mL overnight at 4C. Wells of the plate were washed, blocked with starting blocking buffer (Product # 37538), and incubated with 100 µL per well of a rat anti-IL-4 monoclonal antibody (Product # M450) at a concentration of 0.006, 0.024, 0.097, 0.390, 1.560, 6.250 and 25 µg/mL for 90 minutes at 37C. The plate was washed, then incubated with 100 µL per well of an HRP-conjugated goat anti-rat IgG secondary antibody (Product # 62-9520) at a dilution of 1:1000 for 90 minutes at 37C. Detection was performed using 1-Step Ultra TMB substrate (Product # 34028) for 5 minutes at room temperature in the dark. The reaction was stopped with Stop solution (Product # N600), and absorbances were read on a spectrophotometer at 450-550 nm.

29 References

Western Blot (2)

PloS one

Primary murine CD4+ T cells fail to acquire the ability to produce effector cytokines when active Ras is present during Th1/Th2 differentiation.

"M450 was used in Western Blotting to demonstrate that constitutive Ras signaling inhibits the ability of CD4+ T-cells to properly differentiate into Th1/Th2 effector cytokine-producing cells."

Authors: Janardhan SV,Marks R,Gajewski TF

Year 2015

Species Mouse

Molecular and cellular biology

An RNA polymerase II complex containing all essential initiation factors binds to the activation domain of PAR leucine zipper transcription factor thyroid embryonic factor.

"M450 was used in Western Blotting to study the interaction between an RNA polymerase II complex and thyroid embryonic factor."

Authors: Ossipow V,Fonjallaz P,Schibler U

Year 1999

Species Human

Immunohistochemistry (2)

Biotechnology and bioengineering

Regulation of adipose tissue inflammation and systemic metabolism in murine obesity by polymer implants loaded with lentiviral vectors encoding human interleukin-4.

"M450 was used in Immunohistochemistry to demonstrate that polymer biomaterials implanted into adipose tissue have the potential to modulate local tissue and systemic inflammation and metabolism."

Authors: Youngblood R,Flesher CG,Delproposto J,Baker NA,Neeley CK,Li F,Lumeng CN,Shea LD,O'Rourke RW

Year 2020

Species Mouse

Dilution 1:250

Clinical and experimental immunology

Over-expression of interleukin 10 in mucosal T cells of patients with active ulcerative colitis.

"M450 was used in immunohistochemistry to study the involvement of interleukin 10 in active ulcerative colitis"

Authors: Melgar S,Yeung MM,Bas A,Forsberg G,Suhr O,Oberg A,Hammarstrom S,Danielsson A,Hammarstrom ML

Year 2003

Species Human

More applications with references on thermofisher.com

ICC/IF (1) Flow (12) ELISA (8) Neu (1) Misc (3)