

# IL-4 Monoclonal Antibody (25D2), Biotin

Product Details	
Size	250 µg
Species Reactivity	Human
Published Species	Human
Host/Isotope	Rat / IgG1
Class	Monoclonal
Type	Antibody
Clone	25D2
Conjugate	Biotin
Immunogen	Recombinant human IL-4 (CHO cell-derived)
Form	Liquid
Concentration	0.5 mg/mL
Purification	Protein G
Storage buffer	PBS with 4% BSA
Contains	proprietary Preservative
Storage Conditions	-20°C
RRID	AB_223569

Applications	Tested	Dilution	Published
ELISA (ELISA)	✓	0.003-12.5 µg/mL	2 Publications
Immunohistochemistry (IHC)	-		1 Publication
Western Blot (WB)	✓	1:1000	

## Product Specific Information

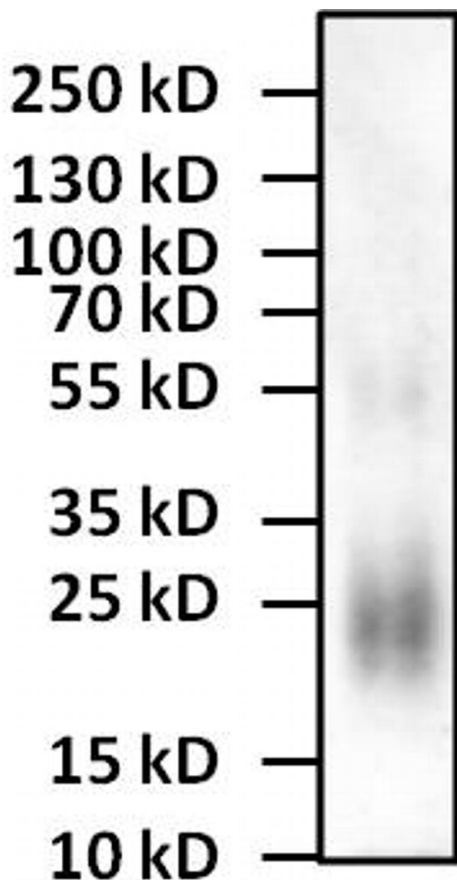
M450B targets IL-4 in WB and ELISA applications and shows reactivity with Human samples.

The M450B immunogen is recombinant human IL-4 (CHO cell-derived).

M450B 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.

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

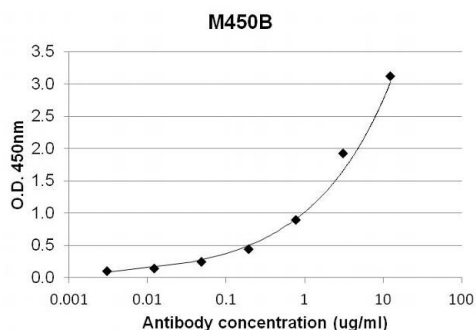


### IL-4 Antibody (M450B) in WB

Western blot analysis of IL-4 was performed by loading 1  $\mu$ g of human recombinant protein IL-4 (1  $\mu$ g/lane, Product # RIL4I) in non-reducing sample buffer and 8  $\mu$ L 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 biotin conjugated IL-4 rat monoclonal antibody (Product # M450B) at a dilution of 1:1000 in blocking buffer overnight at 4°C on a rocking platform, followed by a pre-diluted High Sensitivity Streptavidin-HRP antibody (Product # 21134) at a dilution of 1:50 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 (M450B) in ELISA

Direct ELISA analysis of IL-4 was performed by coating wells of a 96-well plate with 100  $\mu$ L per well of IL-4 (Product # RIL4I) diluted in carbonate/bicarbonate buffer (Product # 28382) at a concentration of 1  $\mu$ g/mL overnight at 4°C. Wells of the plate were washed, blocked with starting blocking buffer (Product # 37538), and incubated with 100  $\mu$ L per well of a biotin conjugated anti-IL-4 monoclonal antibody (Product # M450B) at a concentration of 0.003, 0.012, 0.049, 0.195, 0.780, 3.125 and 12.50  $\mu$ g/mL for 90 minutes at 37°C. The plate was washed, then incubated with 100  $\mu$ L per well of pre-diluted High Sensitivity Streptavidin-HRP antibody (Product # 21134) at a dilution of 1:50 for 90 minutes at 37°C. 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.



## 3 References

### ELISA (2)

**Digestive and liver disease : official journal of the Italian Society of Gastroenterology and the Italian Association for the Study of the Liver**

#### **Interleukin-13 mucosal production in Helicobacter pylori-related gastric diseases.**

"M450B was used in ELISA to study the mucosal production of interleukin 13 in Helicobacter pylori-related gastric diseases"

Authors: Marotti B,Rocco A,De Colibus P,Compare D,de Nucci G,Staibano S,Tatangelo F,Romano M,Nardone G

**Species**  
Human

**Dilution**  
Not Cited

**Year**  
2008

**Journal of immunology (Baltimore, Md. : 1950)**

#### **Antigen-independent Th2 cell differentiation by stimulation of CD28: regulation via IL-4 gene expression and mitogen-activated protein kinase activation.**

"M450B was used in ELISA to investigate the role of interleukin 4 gene expression"

Authors: Skapenko A,Lipsky PE,Kraetsch HG,Kalden JR,Schulze-Koops H

**Species**  
Human

**Dilution**  
Not Cited

**Year**  
2001

### Immunohistochemistry (1)

**Clinical and experimental immunology**

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

"M450B 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

**Species**  
Human

**Dilution**  
Not Cited

**Year**  
2003

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