

IF Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant IF. Catalog # AT2482a

Specification

IF Antibody (monoclonal) (M01) - Product Information

Application WB, E **Primary Accession** P05156 Other Accession NM 000204 Reactivity Human Host mouse Clonality **Monoclonal** Isotype IgG2b Kappa Calculated MW 65750

IF Antibody (monoclonal) (M01) - Additional Information

Gene ID 3426

Other Names

Complement factor I, C3B/C4B inactivator, Complement factor I heavy chain, Complement factor I light chain, CFI, IF

Target/Specificity

IF (NP 000195, 19 a.a. ~ 118 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Dilution

WB~~1:500~1000

Format

Clear, colorless solution in phosphate buffered saline, pH 7.2.

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions

IF Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

IF Antibody (monoclonal) (M01) - Protocols

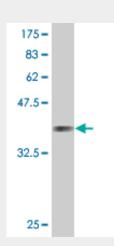
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot

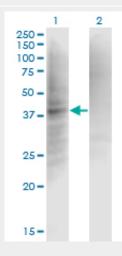


- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

IF Antibody (monoclonal) (M01) - Images



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.74 KDa).

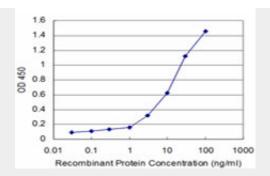


Western Blot analysis of CFI expression in transfected 293T cell line by IF monoclonal antibody (M01), clone 1B3.

Lane 1: CFI transfected lysate (Predicted MW: 42.4 KDa).

Lane 2: Non-transfected lysate.





Detection limit for recombinant GST tagged IF is approximately 0.3ng/ml as a capture antibody.

IF Antibody (monoclonal) (M01) - Background

This gene encodes a serine proteinase that is essential for regulating the complement cascade. The encoded preproprotein is cleaved to produce both heavy and light chains, which are linked by disulfide bonds to form a heterodimeric glycoprotein. This heterodimer can cleave and inactivate the complement components C4b and C3b, and it prevents the assembly of the C3 and C5 convertase enzymes. Defects in this gene cause complement factor I deficiency, an autosomal recessive disease associated with a susceptibility to pyogenic infections. Mutations in this gene have been associated with a predisposition to atypical hemolytic uraemic syndrome, a disease characterized by acute renal failure, microangiopathic hemolytic anemia and thrombocytopenia. Primary glomerulonephritis with immmune deposits is another condition associated with mutation of this gene.

IF Antibody (monoclonal) (M01) - References

Mutations in alternative pathway complement proteins in American patients with atypical hemolytic uremic syndrome. Maga TK, et al. Hum Mutat, 2010 Jun. PMID 20513133.Genetic variants near TIMP3 and high-density lipoprotein-associated loci influence susceptibility to age-related macular degeneration. Chen W, et al. Proc Natl Acad Sci U S A, 2010 Apr 20. PMID 20385819.Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.A systematic gene-based screen of chr4q22-q32 identifies association of a novel susceptibility gene, DKK2, with the quantitative trait of alcohol dependence symptom counts. Kalsi G, et al. Hum Mol Genet, 2010 Jun 15. PMID 20332099.Genetic disorders in complement (regulating) genes in patients with atypical haemolytic uraemic syndrome (aHUS). Westra D, et al. Nephrol Dial Transplant, 2010 Jul. PMID 20106822.