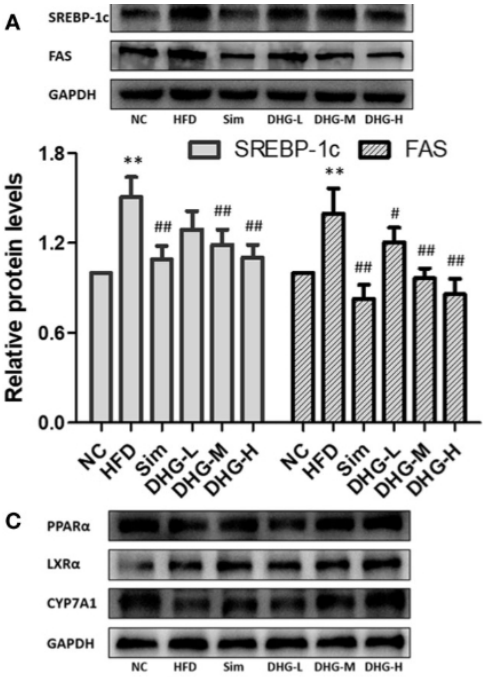
CYP7A1 Monoclonal Antibody

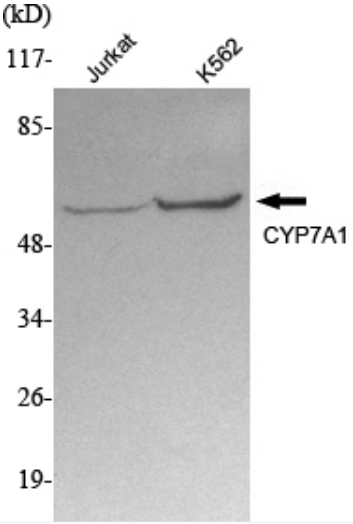
Catalog No	YP-Ab-02349
Isotype	IgG
Reactivity	Human;Golden hamster
Applications	WB
Gene Name	CYP7A1
Protein Name	Cholesterol 7-alpha-monooxygenase
Immunogen	Purified recombinant human CYP7A1 (C-terminus) protein fragments expressed in E.coli.
Specificity	CYP7A1 Monoclonal Antibody detects endogenous levels of CYP7A1 protein.
Formulation	Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with 0.2% sodium azide, 50% glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Western Blot: 1/1000 - 1/2000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	CYP7A1; CYP7; Cholesterol 7-alpha-monooxygenase; CYPVII; Cholesterol 7-alpha-hydroxylase; Cytochrome P450 7A1
Observed Band	
Cell Pathway	Endoplasmic reticulum membrane ; Single-pass membrane protein . Microsome membrane ; Single-pass membrane protein .
Tissue Specificity	Detected in liver.
Function	catalytic activity:Cholesterol + NADPH + O(2) = 7-alpha-hydroxycholesterol + NADP(+) + H(2)O.,cofactor:Heme group.,online information:Cholesterol-7 alpha-hydroxylase entry,pathway:Lipid metabolism; bile acid biosynthesis.,similarity:Belongs to the cytochrome P450 family.,
Background	This gene encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This endoplasmic reticulum membrane protein catalyzes the first reaction in the cholesterol catabolic pathway in the liver, which converts cholesterol to bile acids. This reaction is the rate limiting step and the major site of regulation of bile acid synthesis, which is the primary mechanism for the removal of cholesterol from the body. Polymorphisms in the promoter of this gene are associated with defects in bile acid synthesis. [provided by RefSeq, Feb 2010],

matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Chen, Kuikui, et al. "Investigation of the lipid-lowering mechanisms and active ingredients of Danhe granule on hyperlipidemia based on systems pharmacology." Frontiers in pharmacology 11 (2020): 528.



Western Blot analysis using CYP7A1 Monoclonal Antibody against Jurkat, K562 cell lysate.