## Cytochrome P450 1A1/1A2 Monoclonal Mouse Antibody (MC1)



## **Product Description**

Cytochrome P450 oxidase (commonly abbreviated CYP) is a generic term for a large number of related, but distinct, oxidative enzymes important in vertebrate physiology. The cytochrome P450 mixed-function monooxygenase system is probably the most important element of Phase I metabolism in mammals. P450s are membrane-bound, either in the inner membrane of mitochondria or in the endoplasmic reticulum of cells where they metabolise thousands of endogenous and exogenous compounds. In the liver, these substrates include toxins, drugs, and other unneeded and potentially harmful molecules. Humans have 18 families of cytochrome P450 genes and 43 subfamilies; the CYP1 family is involved in drug metabolism and includes 3 subfamilies, 3 genes and 1 pseudogene.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the CF® Dye Brochure for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

**Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email <a href="mailto:order@biotium.com">order@biotium.com</a> to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 2907, Anti-Cytochrome P450 1A1/1A2 (MC1)

## Product attributes

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Product attributes			
Antibody number	#2907		
Antibody reactivity (target)	Cytochrome P450 1A1/1A2		
Antibody type	Primary		
Host species	Mouse		
Clonality	Monoclonal		
Clone	MC1		
Isotype	IgG1, kappa		
Molecular weight	58 kDa		
Synonyms	Aryl hydrocarbon hydroxylase; CP11; CP12; CYP1A1; CYP1A2; CYP1A1; CYP1A2; Cytochrome P450 family 1 subfamily A polypeptide 1; Cytochrome P450 family 1 subfamily A polypeptide 2; P1 450; P3 450; P450 form 4; P450 form 6; P450 P1; P450 P3		
Human gene symbol	CYP1A1 / CYP1A2		
Entrez gene ID	1543; 1544		
SwissProt	P04798; P05177		
Unigene	437060		
Immunogen	3-methylcholanthrene induced rat cytochrome P450 protein.		
Antibody target cellular localization	Golgi apparatus		
Species reactivity	Human, Mouse, Primate, Rat		
Antibody application notes	For coating for ELISA, order Ab without BSA, Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Optimal dilution and staining procedure for a specific application should be determined by user, Recommended starting concentrations for titration are 1-2 ug/mL for most applications, or 1 ug/million cells/100 uL for flow cytometry		
Positive control	HeLa cells. Liver or Cardiac muscle.		
Shipping condition	HeLa cells. Liver or Cardiac muscle.  Room temperature		
Shipping condition	Room temperature  Note: store BSA-free antibodies at -10 to -35°C, Store at 2 to 8		
Shipping condition Storage Conditions	Room temperature  Note: store BSA-free antibodies at -10 to -35 °C, Store at 2 to 8 °C, Protect fluorescent conjugates from light		
Shipping condition Storage Conditions Regulatory status Antibody/conjugate	Room temperature  Note: store BSA-free antibodies at -10 to -35 °C, Store at 2 to 8 °C, Protect fluorescent conjugates from light  For research use only (RUO)  Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified; BSA-free: 1 mg/mL in		

Email: techsupport@biotium.com

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNC74	CF®740	742/767	633-685	775/50	CF®740 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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