## 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 order@biotium.com to inquire about stock status and lead times before placing your order.

Call us: 800-304-5357 Email: btinfo@biotium.com

<b>Product attributes</b>	i			
Antibody number	#2907			
Antibody reactivity	Cytochrome P450 1A1/1A2			
(target) 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; CYPIA1; CYPIA2; 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	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/mllilion cells/100 uL for flow cytometry			
Positive control	HeLa cells. Liver or Cardiac muscle.			
Shipping condition	Room temperature			
Storage Conditions	Note: store BSA-free antibodies at -10 to -35°C, Store at 2 to 8 °C, Protect fluorescent conjugates from light			
Regulatory status	For research use only (RUO)			
Antibody/conjugate formulation	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/0.05% azide Purified, BSA-free: 1 mg/mL in PBS without azide			
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended			

Antibody # prefix BNC04	Conjugation CF®405S	Ex/Em (nm) 404/431	<b>Laser line</b> 405	Detection channel DAPI (microscopy), AF405	Dye Features 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
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified,	N/A	N/A	N/A	

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