

FOXA1 / HNF3A Monoclonal Mouse Antibody (FOXA1/1241)

Product Description

The transcription factor Forkhead-box A1 (FOXA1), also known as hepatocyte nuclear factor 3-alpha, is a member of the FOX class of transcription factors. HNF-1 (alpha and beta), HNF-3 (alpha, beta and gamma), HNF-4 (alpha and gamma), and HNF-6 compose, in part, a homeoprotein family designated the hepatocyte nuclear factor family. The various HNF-1 isoforms regulate transcription of genes in the liver as well as in other tissues such as kidney, small intestine and thymus. FOXA1 is expressed in normal breast ductal epithelium and other epithelium in different organs, such as lung, pancreas, bladder, prostate, and colon. Recently, FOXA1 has been shown to be a major determinant of estrogen-ER activity and endocrine response in breast cancer cells. FOXA1 expression correlates with estrogen receptor (ER)-positivity, especially in luminal subtype A breast cancers, which is associated with favorable prognosis. FOXA1 is useful in the sub-classification of breast carcinomas. 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. **Catalog number key for antibody number 1241, Anti-FOXA1 (FOXA1/1241)**

Product attributes

Antibody number	#1241
Antibody reactivity (target)	FOXA1, HNF3A
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	FOXA1/1241
Isotype	IgG2b, kappa
Molecular weight	79 kDa
Synonyms	Forkhead box protein A1 (FOXA1); Hepatocyte nuclear factor 3-alpha (HNF-3-alpha or HNF-3A or HNF3A); Transcription factor 3A (TCF-3A or TCF3A)
Human gene symbol	FOXA1
Entrez gene ID	3169
SwissProt	P55317
Unigene	163484
Immunogen	Recombinant human FOXA1 protein fragment (aa467-614) (exact sequence is proprietary)
Antibody target cellular localization	Nucleus
Verified antibody applications	Flow (intracellular) (verified), IF (verified), IHC (FFPE) (verified), WB (verified)
Species reactivity	Human, Rat
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofluorescence: 0.5-1 ug/mL, Immunohistology (formalin): 0.5-1 ug/mL, Staining of formalin-fixed tissues is enhanced by boiling tissue sections in 10 mM Tris, 1 mM EDTA pH 9.0 for 10-20 min followed by cooling at RT for 20 min, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Western blotting 0.5-1 ug/mL, Optimal dilution for a specific application should be determined by user
Positive control	HepG-2 or MCF-7 cells. Liver, Pancreas, Bladder, Prostate, Colon and Lung and Breast.
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C. Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
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
Antibody research areas	Cancer, Developmental biology, Endocrinology, Transcription factors
Tumor expression	Breast cancer

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
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	

Alexa Fluor, Pacific Blue, Pacific Orange, and Texas Red are trademarks or registered trademarks of Thermo Fisher Scientific; Cy is a registered trademark of Cytiva; IRDye, LI-COR, LI-COR Bioscience.