## Tal1 Monoclonal Mouse Antibody (TAL1/3146)



## **Product Description**

Activation of TAL1 characterizes up to 60% of cases of human T cell acute lymphoblastic leukemia, making it the most frequent gain-of-function mutation observed in this disorder. TAL1 (also designated SCL) is a serine phosphoprotein and basic helix-loop-helix transcription factor known to regulate embryonic hematopoiesis. This transcription factor binds as a heterodimer with E2A and HEB/HTF4 to a nucleotide sequence motif termed the E-box. In addition, leukemogenesis is accelerated dramatically by transgenic co-expression of TAL1 and the catalytic subunit of casein kinase II, a serine/threonine protein kinase known to modulate the activity of other HLH transcription factors.

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 3146, Anti-Tal1 (TAL1/3146)

## Droduct attributes

Product attributes					
Antibody number	#3146				
Antibody reactivity (target)	Fal1				
Antibody type	Primary				
Host species	Mouse				
Clonality	Monoclonal				
Clone	TAL1/3146				
Isotype	IgG1, kappa				
Molecular weight	42 kDa				
Synonyms	bHLHa17; Class A basic helix-loop-helix protein 17; OTTHUMP0000009563; OTTHUMP0000009564; SCL; STEM CELL LEUKEMIA HEMATOPOIETIC TRANSCRIPTION FACTOR; Stem cell protein; T cell acute lymphocytic leukemia 1; T cell acute lymphocytic leukemia 1 protein; T cell acute lymphocytic leukemia 1 protein; T cell acute lymphocytic leukemia 1 protein; T cell acute lymphocytic leukemia protein 1; T-cell leukemia/lymphoma 5 protein; T-cell acute lymphocytic leukemia protein 1; T-cell leukemia/lymphoma protein 5; Tal 1 product; TAL 1 protein; TAL bHLH transcription factor 1 erythroid differentiation factor; TAL-1				
Human gene symbol	TAL1				
Entrez gene ID	6886				
SwissProt	P17542				
Unigene	705618				
Immunogen	Recombinant human full-length TAL1 protein				
Antibody target cellular localization	Nucleus				
Species reactivity	Human				
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	A549 xenograft.				
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				
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				
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.				

Call us: 800-304-5357 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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