

## Tal1 Monoclonal Mouse Antibody (TAL1/2707)

|     |   | NR | R |                    |
|-----|---|----|---|--------------------|
| Kda |   |    |   |                    |
| 250 |   |    |   |                    |
| 150 |   | -  |   |                    |
| 100 |   |    |   |                    |
| 75  | - |    |   |                    |
| 50  | - |    | - | 2ug load           |
| 37  |   |    |   | NR=Non-<br>reduced |
| 25  | - |    |   | R=reduce           |
| 20  |   |    |   |                    |
| 15  | _ |    |   |                    |

## **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 IIHLH 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 <u>CF® Dye Brochure</u> 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 <u>order@biotium.com</u> to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 2707, Anti-Tal1 (TAL1/2707)

## Call us : <u>800-304-5357</u> Email: <u>techsupport@biotium.com</u> Product attributes

| Product attributes  |  |
|---|--|
| Antibody number   | #2707  |
| Antibody reactivity (target)  | Tal1   |
| Antibody type   | Primary  |
| Host species  | Mouse  |
| Clonality   | Monoclonal   |
| Clone   | TAL1/2707  |
| Isotype   | lgG2a, kappa   |
| Molecular weight  | 42 kDa   |
| Synonyms  | bHLHa17; Class A basic helix-loop-helix protein 17;<br>OTTHUMP0000009563; OTTHUMP00000009564; SCL;<br>STEM CELL LEUKEMIA HEMATOPOIETIC TRANSCRIPTION<br>FACTOR; Stem cell protein; T cell acute lymphocytic leukemia 1<br>rotein; T cell acute lymphocytic leukemia 1 protein; T cell acute<br>lymphocytic leukemia 1 protein; T cell acute<br>mphocytic leukemia 1 protein; T cell acute<br>leukemia/lymphoma protein 5; Tal 1 product; TAL 1 protein; TAL<br>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<br>localization  | Nucleus  |
| Species reactivity  |  |
|   | Human  |
| Antibody application notes  | Human<br>For coating for ELISA, order Ab without BSA, Higher<br>concentration may be required for direct detection using primary<br>antibody conjugates than for indirect detection with secondary<br>antibody. Optimal dilution and staining procedure for a specific<br>application should be determined by user, Recommended<br>starting concentrations for titration are 1-2 ug/mL for most<br>applications, or 1 ug/million cells/100 uL for flow cytometry   |
| Antibody application notes Positive control   | For coating for ELISA, order Ab without BSA, Higher<br>concentration may be required for direct detection using primary<br>antibody conjugates than for indirect detection with secondary<br>antibody. Optimal dilution and staining procedure for a specific<br>application should be determined by user, Recommended<br>starting concentrations for titration are 1-2 ug/mL for most   |
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| Positive control  | For coating for ELISA, order Ab without BSA, Higher<br>concentration may be required for direct detection using primary<br>antibody conjugates than for indirect detection with secondary<br>antibody. Optimal dilution and staining procedure for a specific<br>application should be determined by user, Recommended<br>starting concentrations for titration are 1-2 ug/mL for most<br>applications, or 1 ug/million cells/100 uL for flow cytometry<br>A549 xenograft.   |
| Positive control<br>Shipping condition  | For coating for ELISA, order Ab without BSA, Higher<br>concentration may be required for direct detection using primary<br>antibody conjugates than for indirect detection with secondary<br>antibody. Optimal dilution and staining procedure for a specific<br>application should be determined by user, Recommended<br>starting concentrations for titration are 1-2 ug/mL for most<br>applications, or 1 ug/million cells/100 uL for flow cytometry<br>A549 xenograft.<br>Room temperature<br>Store at 2 to 8 °C, Protect fluorescent conjugates from light,   |
| Positive control<br>Shipping condition<br>Storage Conditions  | For coating for ELISA, order Ab without BSA, Higher<br>concentration may be required for direct detection using primary<br>antibody conjugates than for indirect detection with secondary<br>antibody. Optimal dilution and staining procedure for a specific<br>application should be determined by user, Recommended<br>starting concentrations for titration are 1-2 ug/mL for most<br>applications, or 1 ug/million cells/100 uL for flow cytometry<br>A549 xenograft.<br>Room temperature<br>Store at 2 to 8 °C, Protect fluorescent conjugates from light,<br>Note: store BSA-free antibodies at -10 to -35 °C   |
| Positive control<br>Shipping condition<br>Storage Conditions<br>Regulatory status<br>Antibody/conjugate | For coating for ELISA, order Ab without BSA, Higher<br>concentration may be required for direct detection using primary<br>antibody, conjugates than for indirect detection with secondary<br>antibody, optimal dilution and staining procedure for a specific<br>application should be determined by user, Recommended<br>starting concentrations for titration are 1-2 ug/mL for most<br>applications, or 1 ug/million cells/100 uL for flow cytometry<br>A549 xenograft.<br>Room temperature<br>Store at 2 to 8 °C, Protect fluorescent conjugates from light,<br>Note: store BSA-free antibodies at -10 to -35 °C<br>For research use only (RUO)<br>Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP<br>conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL<br>in PBS/0.05% BSA/0.05% BSA/0.05% mg/mL in graft, BSA-free and the graft of |

| Antibody # prefix | Conjugation           | Ex/Em (nm) | Laser line | Detection channel           | Dye Features     |
|-------------------|-----------------------|------------|------------|-----------------------------|------------------|
| BNC04             | CF®405S               | 404/431    | 405        | DAPI (microscopy),<br>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,<br>BSA-free | N/A        | N/A        | N/A                         |                  |

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