

# CD90 / Thy1 Monoclonal Mouse Antibody (AF-9)

## Product Description

Recognizes a protein of 18-35 kDa, identified as CD90 (also known as Thy1). CD90 is a member of the immunoglobulin superfamily. It may contribute to inhibition of proliferation/differentiation of hematopoietic stem cells and neuron memory formation in the CNS. It consists of a single Ig domain (112 amino acids; 25-35 kDa) inserted into the cell membrane via a GPI anchor. Expressed by hematopoietic stem cells and neurons in all species studied. Its highly expressed in connective tissue and various fibroblast and stromal cell lines, expressed on all thymocytes and peripheral T cells in mice, but in humans expressed only on small % fetal thymocytes, 10-40% of CD34 cells in bone marrow, and <1% of CD3 CD4 lymphocytes in peripheral circulation. It is also expressed by human lymph node HEV endothelium but not other endothelia. Lastly, it is expressed by a limited number of lymphoblastoid and leukemic cell lines.

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](mailto:order@biotium.com) to inquire about stock status and lead times before placing your order.

**Catalog number key for antibody number 0987, Anti-CD90 (AF-9)**

## Product attributes

<b>Antibody number</b>	#0987
<b>Antibody reactivity (target)</b>	CD90, Thy1
<b>Antibody type</b>	Primary
<b>Host species</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Clone</b>	AF-9
<b>Isotype</b>	IgG1, kappa
<b>Molecular weight of antigen</b>	18-35 kDa
<b>Synonyms</b>	CD54; Cell surface glycoprotein P3.58; Human rhinovirus receptor; ICAM-1; Intercellular adhesion molecule 1; Ly 47; Major group rhinovirus receptor; MALA2; MyD10; Surface antigen of activated B cells
<b>Human gene symbol</b>	THY1
<b>Entrez gene ID</b>	7070
<b>SwissProt</b>	P04216
<b>Unigene</b>	644697
<b>Immunogen</b>	Human T-lymphoma cells
<b>Antibody target cellular localization</b>	Plasma membrane
<b>Species reactivity</b>	Cow, Human
<b>Expected antibody applications</b>	Flow, surface (published for clone), IHC (FFPE) (published for clone), IF (published for clone)
<b>Antibody application notes</b>	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, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Optimal dilution for a specific application should be determined by user
<b>Positive control</b>	IMR-32, CCRF-CEM or MOLT-4 cells. Human uterus.
<b>Shipping condition</b>	Room temperature
<b>Storage Conditions</b>	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
<b>Shelf life</b>	Guaranteed for at least 24 months from date of receipt when stored as recommended
<b>Regulatory status</b>	For research use only (RUO)
<b>Antibody/conjugate formulation</b>	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
<b>Antibody research areas</b>	Cell adhesion, Immunology
<b>Product origin</b>	Product may contain either bovine serum albumin (BSA) from bovine serum ( <i>Bos taurus</i> ), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.

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

Note: References for this clone sold by other suppliers may be listed for expected applications.

- Int J Stem Cell Res Ther (2018) 5:056. (IHC, FFPE)
- Biology Open 2017 6: 1423-1433. (Flow)
- Gastroenterol (2009) 136(2): P705-714. (IF)

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Product link: <https://biotium.com/product/monoclonal-anti-cd90-af-9/>