

# 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)**

## References

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

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

### Product attributes

Antibody number	#0987
Antibody reactivity (target)	CD90, Thy1
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	AF-9
Isotype	IgG1, kappa
Molecular weight	18-35 kDa
Synonyms	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
Human gene symbol	THY1
Entrez gene ID	7070
SwissProt	P04216
Unigene	644697
Immunogen	Human T-lymphoma cells
Antibody target cellular localization	Plasma membrane
Species reactivity	Cow, Human
Expected antibody applications	Flow, surface (published for clone), IHC (FFPE) (published for clone), IF (published for clone)
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, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Optimal dilution for a specific application should be determined by user
Positive control	IMR-32, CCRF-CEM or MOLT-4 cells. Human uterus.
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	Cell adhesion, Immunology

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>
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.