

# CD40 / TNFRSF5 Monoclonal Mouse Antibody (C40/1605)

## Product Description

CD40 is a receptor on antigen-presenting cells of the immune system and is essential for mediating a broad variety of immune and inflammatory responses including T cell-dependent immunoglobulin class switching, memory B cell development, and germinal center formation. AT-hook transcription factor AKNA is reported to coordinately regulate the expression of this receptor and its ligand, which may be important for homotypic cell interactions. Adaptor protein TNFR2 interacts with this receptor and serves as a mediator of the signal transduction. The interaction of this receptor and its ligand is found to be necessary for amyloid-beta-induced microglial activation, and thus is thought to be an early event in Alzheimer disease pathogenesis. CD40 is expressed on B-lymphocytes, follicular dendritic cells, bone marrow-derived dendritic cells, thymic epithelium, and interdigitating cells in the T-cell zones of secondary lymphoid organs. 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 1605, Anti-CD40 (C40/1605)**

## Product attributes

Antibody number	#1605
Antibody reactivity (target)	CD40, TNFRSF5
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	C40/1605
Isotype	IgG1, kappa
Molecular weight	43 kDa
Synonyms	B-cell surface antigen CD40; Bp50; CD40; CD40L receptor; GP39; HIGM1; IGM; IMD3; p50; TBAM; TNF receptor superfamily member 5; TNFRSF5; TRAP
Human gene symbol	CD40
Entrez gene ID	958
SwissProt	P25942
Unigene	472860
Immunogen	Recombinant human full-length CD40 protein
Antibody target cellular localization	Plasma membrane, Secreted (extracellular)
Verified antibody applications	Flow (verified), IHC (FFPE) (verified)
Species reactivity	Human
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunohistology (formalin) 1-2 ug/mL, Staining of formalin-fixed tissues requires 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, Immunofluorescence 1-2 ug/mL Flow cytometry 0.5-1 ug/million cells, Western blotting 0.5-1 ug/mL, Optimal dilution for a specific application should be determined by user
Positive control	L-428 Cells, Tonsil, Spleen or Thymus
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	Immunology
Cell/tissue expression	Antigen presenting cells

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.