

# Protocadherin-FAT2 Monoclonal Mouse Antibody (8C5)

## Product Description

This antibody recognizes a protein of 480 kDa, which is identified as FAT2. The cadherins represent a family of Ca<sup>2+</sup>-dependent adhesion molecules that function to mediate cell-to-cell binding that is critical for the maintenance of structure and morphogenesis. Cadherins each contain a large extracellular domain at the N-terminus, which is characterized by a series of five homologous repeats, the most distal of which is thought to be responsible for binding specificity. The relatively short C-terminal intracellular domain interacts with a variety of cytoplasmic proteins, including beta-catenin, to regulate cadherin function. The cadherin superfamily includes cadherins, protocadherins, desmogleins and desmocollins. FAT2 (FAT tumor suppressor homolog 2) is a single-pass type I membrane protein that belongs to the protocadherin subfamily of cadherins. FAT2 contains one Laminin G-like domain, two EGF-like domains and 32 cadherin domains and is believed to function as a cell adhesion molecule, controlling cell proliferation and playing an important role in cerebellum development. 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 1320, Anti-Protocadherin-FAT2 (8C5)**

## Product attributes

Antibody number	#1320
Antibody reactivity (target)	Protocadherin-FAT2
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	8C5
Isotype	IgG1, kappa
Molecular weight	480 kDa
Synonyms	FAT tumor suppressor homolog 2 (HFAT2); cadherin family member 8 (CDHF8); cadherin-related family member 9 (CDHR9); multiple EGF-like domains protein 1; multiple epidermal growth factor-like domains 1 (MEGF1); multiple epidermal growth factor-like domains protein 1; protocadherin FAT2
Human gene symbol	FAT2
Entrez gene ID	2196
SwissProt	Q9NYQ8
Unigene	591255
Immunogen	Purified recombinant human FAT2 fusion protein
Verified antibody applications	IHC (FFPE) (verified)
Antibody target cellular localization	Plasma membrane
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, Immunofluorescence: 1-2 ug/mL, Immunohistology (formalin): 0.5-1 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 min, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Optimal dilution for a specific application should be determined by user
Positive control	Esophagus, Cervix, Uterus, Tonsil or Cerebellum.
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

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	

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