

CFTR Monoclonal Mouse Antibody (CFTR/1341)

Product Description

This antibody recognizes a protein of 165-170 kDa, identified as cystic fibrosis transmembrane conductance regulator (CFTR). CFTR is composed of two membrane-spanning domains (MSD), two nucleotide-binding domains (NBD), and an R domain. It is structurally similar to multidrug resistance (Mdr1) protein and both are members of the superfamily of ATP-binding cassette (ABC) transporters, also known as traffic ATPases, which are implicated in the movement of various substrates. The CFTR protein is a small conductance adenosine 3',5'-cyclic monophosphate (cAMP)-activated chloride ion channel found in the apical membranes of epithelia within the pancreas, airway, intestine, bile duct, sweat gland, and male genital ducts. CFTR is a valuable marker of human pancreatic duct cell development and differentiation.

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 to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 1341, Anti-CFTR (CFTR/1341)

Product attributes

| | |
|---------------------------------------|--|
| Antibody number | #1341 |
| Antibody reactivity (target) | CFTR |
| Antibody type | Primary |
| Host species | Mouse |
| Clonality | Monoclonal |
| Clone | CFTR/1341 |
| Isotype | IgG1 |
| Molecular weight | 165-170 kDa |
| Synonyms | ABC35; ATP Binding Cassette Superfamily C Member 7 (ABCC7); cAMP-dependent chloride channel; CFTR; CFTR/MRP; Channel conductance-controlling ATPase; Cystic Fibrosis Transmembrane Conductance Regulator; MRP7; TNR CFTR |
| Human gene symbol | CFTR |
| Entrez gene ID | 1080 |
| SwissProt | P13569 |
| Unigene | 489786, 621460, 661104 |
| Immunogen | Recombinant human full-length CFTR |
| Antibody target cellular localization | Plasma membrane |
| Verified antibody applications | IHC (FFPE) (verified) |
| Species reactivity | Human |
| Antibody application notes | Staining of formalin-fixed tissues is enhanced by 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 0.5-1 ug/mL. Western blotting 0.5-1 ug/mL. Optimal dilution for a specific application should be determined by user |
| Positive control | MOLT-4 cells. Pancreas, Kidney or Placenta. |
| 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 | Ion channels |
| Product origin | 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. |
| Cell/tissue expression | Epithelial cells |

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

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