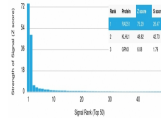


RAD51 Monoclonal Mouse Antibody (RAD51/2701)



Product Description

RAD51 is one of the key factors of DNA repair by homologous recombination and has been shown to have anti-apoptotic activity in tumor cells. RAD51 protein interacts with a variety of tumor suppressor proteins including p53, BRCA1 and BRCA2. Elevated expression of RAD51 enhances radio-resistance of human tumor cells. Overexpression of RAD51 protein in tumor cells renders them resistant against cytotoxic drugs like Cisplatin. RAD51 interacts with BRCA1 and BRCA2 to influence subcellular localization and cellular response to DNA damage. BRCA2 inactivation may be a key event leading to genomic instability and tumorigenesis from deregulation of RAD51. High-level expression of RAD51 has been observed in a variety of human malignancies. RAD51 overexpression correlates with histological grading of the tumor in invasive ductal mammary carcinoma.

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.

Product attributes

Antibody number	#2701
Antibody reactivity (target)	RAD51
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	RAD51/2701
Isotype	IgG2b, kappa
Molecular weight	37 kDa
Synonyms	RCA1/BRCA2 containing complex; subunit 5; BRCC5; DNA repair protein RAD51; FANCR; Hst16930; MRMV2; RAD51; RAD51 recombinase; RAD51A; RECA; RecA like protein; Recombination protein A
Human gene symbol	RAD51
Entrez gene ID	5888
SwissProt	Q06609
Unigene	631709
Immunogen	Recombinant fragment of human RAD51 protein (around aa 1-134) (exact sequence is proprietary)
Verified antibody applications	Flow (intracellular) (verified), WB (verified)
Antibody target cellular localization	Nucleus
Species reactivity	Human
Positive control	K562, HeLa or MCF-7 cells. Colon or breast Carcinoma.
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
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
Validated in protein array	Monospecific
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended

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
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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