RAD51 (Prognostic and Response to Chemotherapy Marker) Antibody

Mouse Monoclonal Antibody [Clone RAD51/2702]

Catalog No	Format	Size
5888-MSM2-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
5888-MSM2-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
5888-MSM2-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

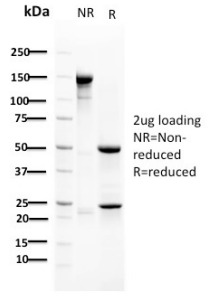
Applications	Tested Dillution	Note
Flow Cytometry (Flow)	1-2ug/million cells	
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

Product Details

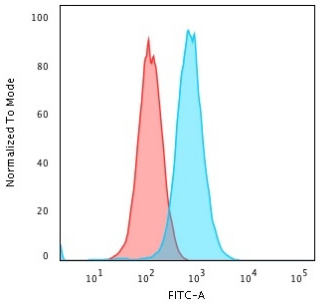
Clone	RAD51/2702
Gene Name	RAD51
Immunogen	Recombinant fragment of human RAD51 protein (around aa 1-134) (exact sequence is proprietary)
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG1 / Kappa
Mol. Weight of Antigen	37kDa
Cellular Localization	Centrosome, Chromosome, Cytoplasm, Cytoskeleton, Microtubule organizing center, Mitochondrion matrix, Nucleus, Perinuclear region
Species Reactivity	Human
Positive Control	HeLa, K562, MCF-7 cells. Colon or breast Carcinoma.

**Optimal dilution for a specific application should be determined.*

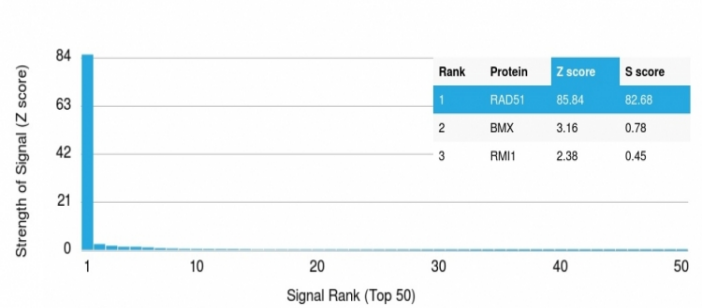
Product Images for RAD51 (Prognostic and Response to Chemotherapy Marker) Antibody



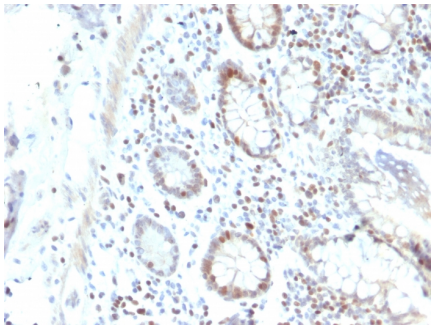
SDS-PAGE Analysis of Purified RAD51 Mouse Monoclonal Antibody (RAD51/2702). Confirmation of Purity and Integrity of Antibody.



Flow Cytometric Analysis of K562 cells using RAD51 Mouse Monoclonal Antibody (RAD51/2702) followed by Goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).



Analysis of Protein Array containing more than 19,000 full-length human proteinsusing RAD51 Mouse Monoclonal Antibody (RAD51/2702) Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



Formalin-fixed, paraffin-embedded human Colon Carcinoma stained with RAD51 Mouse Monoclonal Antibody (RAD51/2702).

Specificity & Comments

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.

Supplied As

200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Research Areas

Breast Cancer, Infectious Disease, Nuclear Marker, Transcription Factors

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis.There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.