

## RAD51 (Prognostic and Response to Chemotherapy Marker) Antibody

Mouse Monoclonal Antibody [Clone RAD51/2753]

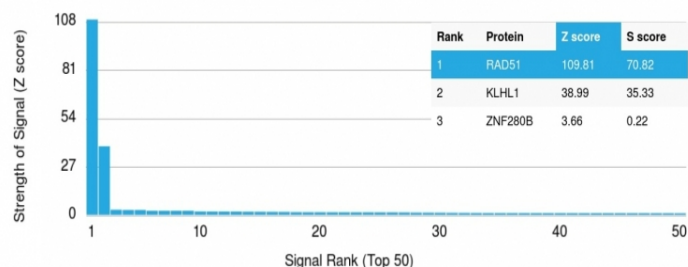
Catalog No	Format	Size
5888-MSM3-P0	Purified Ab with BSA and Azide	200ug/ml
5888-MSM3-P1	Purified Ab with BSA and Azide	200ug/ml
5888-MSM3-P1ABX	Purified Ab WITHOUT BSA and Azide	1.0mg/ml

Applications	Tested Dilution
Western Blot (WB)	2-4ug/ml

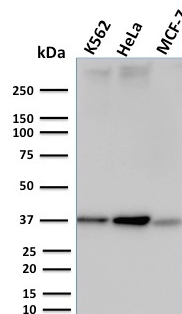
Product Details	
<b>Clone</b>	RAD51/2753
<b>Gene Name</b>	RAD51
<b>Immunogen</b>	Recombinant fragment of human RAD51 protein (around aa 1-134) (exact sequence is proprietary)
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype / Light Chain</b>	IgG
<b>Mol. Weight of Antigen</b>	37kDa
<b>Cellular Localization</b>	Centrosome, Chromosome, Cytoplasm, Cytoskeleton, Microtubule organizing center, Mitochondrion matrix, Nucleus, Perinuclear region
<b>Species Reactivity</b>	Human
<b>Positive Control</b>	HeLa or 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



Analysis of Protein Array containing more than 19,000 full-length human proteins using RAD51 Mouse Monoclonal Antibody (RAD51/2753) Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (Monoclonal Antibody) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ 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 HuProt™ 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 Monoclonal Antibody to its intended target. A Monoclonal Antibody is considered to be specific to its intended target, if the Monoclonal Antibody has an S-score of at least 2.5. For example, if a Monoclonal Antibody 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 Monoclonal Antibody to protein X is equal to 29.



Western Blot Analysis of K562, HeLa and MCF-7 cell lysates using RAD51 Mouse Monoclonal Antibody (RAD51/2753).

### 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.

### Research Areas

Breast Cancer, Infectious Disease, Nuclear Marker, Transcription Factors

### Known Applications & Suggested Dilutions

ELISA (For coating, order Ab without BSA) | Western Blot (1-2ug/ml)  
| Optimal dilution for a specific application should be determined.

### 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.

### 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.