

## Product datasheet for **TA385120M**

### **RAD51 Rabbit Monoclonal Antibody [Clone ID: R06-5G2]**

#### **Product data:**

Product Type:	Primary Antibodies
Clone Name:	R06-5G2
Applications:	IF, IP, WB
Recommended Dilution:	WB: 1/2000-1/10000 ICC/IF: 1/200-1/100 IP: 1/20
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Monoclonal
Immunogen:	A synthetic peptide of human Rad51
Formulation:	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA
Concentration:	lot specific
Purification:	Affinity Purified
Conjugation:	Unconjugated
Storage:	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Stability:	1 year
Predicted Protein Size:	Calculated MW: 37 kDa; Observed MW: 37 kDa
Gene Name:	RAD51 recombinase
Database Link:	<a href="#">Entrez Gene 5888 Human Q06609</a>



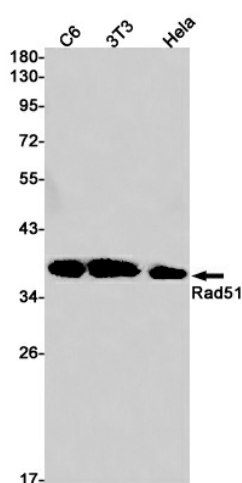
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**Background:**

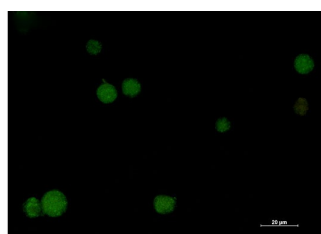
Swiss-Prot Acc.Q06609.Plays an important role in homologous strand exchange, a key step in DNA repair through homologous recombination (HR) (PubMed:28575658). Binds to single and double-stranded DNA and exhibits DNA-dependent ATPase activity. Catalyzes the recognition of homology and strand exchange between homologous DNA partners to form a joint molecule between a processed DNA break and the repair template. Binds to single-stranded DNA in an ATP-dependent manner to form nucleoprotein filaments which are essential for the homology search and strand exchange (PubMed:26681308). Part of a PALB2-scaffolded HR complex containing BRCA2 and RAD51C and which is thought to play a role in DNA repair by HR. Plays a role in regulating mitochondrial DNA copy number under conditions of oxidative stress in the presence of RAD51C and XRCC3. Also involved in interstrand cross-link repair (PubMed:26253028).

**Synonyms:**

BRCC5; HRAD51; HsRad51; HsT16930; RAD51A; RAD51D; RAD51L3; RECA

**Product images:**


Western blot detection of Rad51 in C6,3T3,HeLa cell lysates using Rad51 Rabbit mAb(1:1000 diluted).Predicted band size:37kDa.Observed band size:37kDa.



Immunocytochemistry analysis of Rad51 (green) in Jurkat using Rad51 antibody,and DAPI(blue).