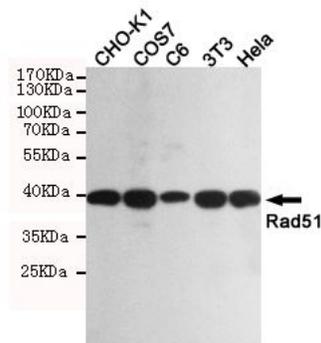




Rad51

Mouse monoclonal Antibody

#53142

Catalog Number: 53142**Amount:** 100µg/100µl**Swiss-Prot No. :** Q06609**Gene name:** rad51**Gene id:** 5888**Clone Number:** 4H10-G5-H4**Form of Antibody:** Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with 0.2% sodium azide, 50% glycerol**Storage/Stability:** Store at -20°C/1 year**Immunogen:** Purified recombinant human Rad51 protein fragments expressed in E.coli**Purification:** affinity-chromatography**Specificity/Sensitivity:** This antibody detects endogenous levels of Rad51 and does not cross-react with related proteins**Reactivity:** Human, Mouse, Rat, Monkey**Applications:** Predicted MW: 37kd WB: 1:1000

Western blot detection of Rad51 in CHO-K1, COS7, C6, 3T3 and HeLa cell lysates using Rad51 mouse mAb (1:1000 diluted). Predicted band size: 37KDa. Observed band size: 37KDa.

Background:

The protein encoded by this gene is a member of the RAD51 protein family. RAD51 family members are highly similar to bacterial RecA and *Saccharomyces cerevisiae* Rad51, and are known to be involved in the homologous recombination and repair of DNA. This protein can interact with the ssDNA-binding protein RPA and RAD52, and it is thought to play roles in homologous pairing and strand transfer of DNA. This protein is also found to interact with BRCA1 and BRCA2, which may be important for the cellular response to DNA damage. BRCA2 is shown to regulate both the intracellular localization and DNA-binding ability of this protein. Loss of these controls following BRCA2 inactivation may be a key event leading to genomic instability and tumorigenesis. Multiple transcript variants encoding different isoforms have been found for this gene.