

RAD18 Antibody (monoclonal) (M01)**Mouse monoclonal antibody raised against a partial recombinant RAD18.****Catalog # AT3545a****Specification**

RAD18 Antibody (monoclonal) (M01) - Product Information

Application	WB, IHC, IF
Primary Accession	O9NS91
Other Accession	NM_020165
Reactivity	Human, Rat
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b Kappa
Calculated MW	56223

RAD18 Antibody (monoclonal) (M01) - Additional Information**Gene ID** 56852**Other Names**

E3 ubiquitin-protein ligase RAD18, 632-, Postreplication repair protein RAD18, hHR18, hRAD18, RING finger protein 73, RAD18, RNF73

Target/Specificity

RAD18 (NP_064550, 332 a.a. ~ 430 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Dilution

WB~~1:500~1000

IHC~~1:100~500

IF~~1:50~200

Format

Clear, colorless solution in phosphate buffered saline, pH 7.2 .

Storage

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions

RAD18 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

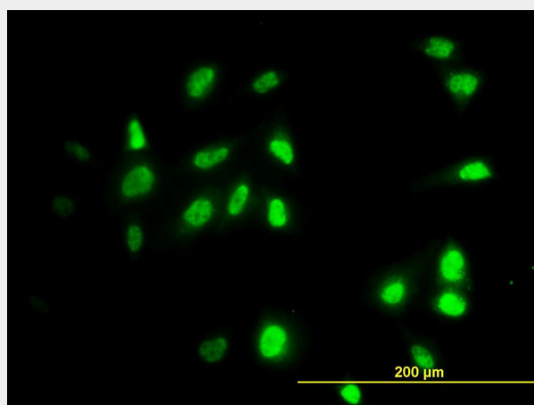
RAD18 Antibody (monoclonal) (M01) - Protocols

Provided below are standard protocols that you may find useful for product applications.

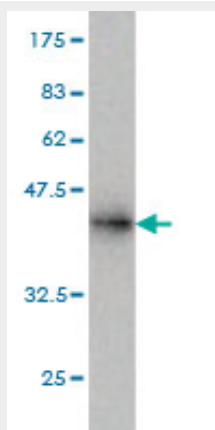
- [Western Blot](#)

- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

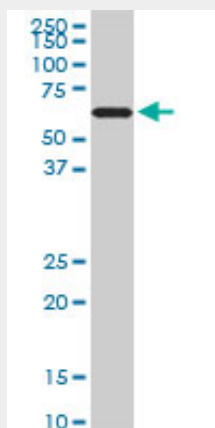
RAD18 Antibody (monoclonal) (M01) - Images



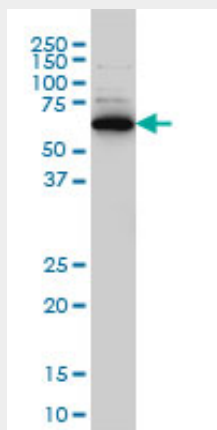
Immunofluorescence of monoclonal antibody to RAD18 on HeLa cell. [antibody concentration 25 ug/ml]



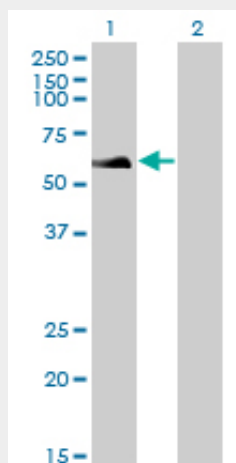
Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.63 KDa) .



RAD18 monoclonal antibody (M01), clone 3H7. Western Blot analysis of RAD18 expression in PC-12 ((Cat # AT3545a)

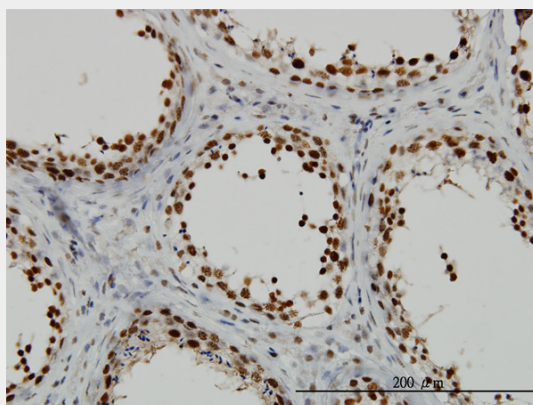


RAD18 monoclonal antibody (M01), clone 3H7 Western Blot analysis of RAD18 expression in Hela S3 NE ((Cat # AT3545a)

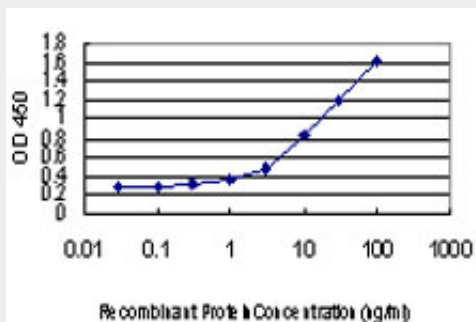


Western Blot analysis of RAD18 expression in transfected 293T cell line by RAD18 monoclonal antibody (M01), clone 3H7.

Lane 1: RAD18 transfected lysate(56.2 KDa).
Lane 2: Non-transfected lysate.



Immunoperoxidase of monoclonal antibody to RAD18 on formalin-fixed paraffin-embedded human testis. [antibody concentration 1.5 ug/ml]



Detection limit for recombinant GST tagged RAD18 is approximately 0.1ng/ml as a capture antibody.

RAD18 Antibody (monoclonal) (M01) - Background

The protein encoded by this gene is highly similar to *S. cerevisiae* DNA damage repair protein Rad18. Yeast Rad18 functions through its interaction with Rad6, which is an ubiquitin-conjugating enzyme required for post-replication repair of damaged DNA. Similar to its yeast counterpart, this protein is able to interact with the human homolog of yeast Rad6 protein through a conserved ring-finger motif. Mutation of this motif results in defective replication of UV-damaged DNA and hypersensitivity to multiple mutagens.

RAD18 Antibody (monoclonal) (M01) - References

1. The ubiquitin specific protease USP34 promotes ubiquitin signaling at DNA double-strand breaks. Sy SM, Jiang J, O WS, Deng Y, Huen MS. *Nucleic Acids Res.* 2013 Jul 17.
2. Phosphorylation of human INO80 is involved in DNA damage tolerance. Kato D, Waki M, Umezawa M, Aoki Y, Utsugi T, Ohtsu M, Murakami Y. *Biochem Biophys Res Commun.* 2011 Dec 7. [Epub ahead of print]
3. Elevated expression of Rad18 regulates melanoma cell proliferation. Wong RP, Aguisa-Toure AH, Wani AA, Khosravi S, Martinka M, Martinka M, Li G. *Pigment Cell Melanoma Res.* 2011 Dec 6. doi: 10.1111/j.1755-148X.2011.00948.x. [Epub ahead of print]
4. NBS1 Recruits RAD18 via a RAD6-like Domain and Regulates Pol β -Dependent Translesion DNA Synthesis. Yanagihara H, Kobayashi J, Tateishi S, Kato A, Matsuura S, Tauchi H, Yamada K, Takezawa J, Sugawara K, Masutani C, Hanaoka F, Weemaes CM, Mori T, Zou L, Komatsu K. *Mol Cell.* 2011 Sep 2;43(5):788-97.
5. Tumour suppressor ING1b maintains genomic stability upon replication stress. Wong RP, Lin H, Khosravi S, Piche B, Jafarnejad SM, Chen DW, Li G. *Nucleic Acids Res.* 2011 Jan 11. [Epub ahead of print]
6. WRN participates in translesion synthesis pathway through interaction with NBS1. Kobayashi J, Okui M, Asaithamby A, Burma S, Chen BP, Tanimoto K, Matsuura S, Komatsu K, Chen DJ. *Mech Ageing Dev.* 2010 Jun 17. [Epub ahead of print]
7. Differential roles for DNA Polymerases Eta, Zeta and REV1 in lesion bypass of intrastrand versus interstrand DNA cross-links. Hicks JK, Chute CL, Paulsen MT, Ragland RL, Howlett NG, Gueranger Q, Glover TW, Canman CE. *Mol Cell Biol.* 2009 Dec 22. [Epub ahead of print]