

# RNF168 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant RNF168.

Catalog # AT3669a

## Product Information

---

<b>Application</b>	WB, IHC, IF
<b>Primary Accession</b>	<a href="#">Q8IYW5</a>
<b>Other Accession</b>	<a href="#">NM_152617</a>
<b>Reactivity</b>	Human
<b>Host</b>	Mouse
<b>Clonality</b>	monoclonal
<b>Isotype</b>	IgG2b Kappa
<b>Clone Names</b>	30
<b>Calculated MW</b>	65020

## Additional Information

---

<b>Gene ID</b>	165918
<b>Other Names</b>	E3 ubiquitin-protein ligase RNF168, hRNF168, 632-, RING finger protein 168, RNF168
<b>Target/Specificity</b>	RNF168 (NP_689830, 462 a.a. ~ 571 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
<b>Dilution</b>	WB~~1:500~1000 IHC~~1:100~500 IF~~1:50~200
<b>Format</b>	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
<b>Storage</b>	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
<b>Precautions</b>	RNF168 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

## Background

---

The complex repair response elicited by DNA double-strand breaks (DSBs) includes recruitment of several DNA repair proteins and ubiquitination of H2A-type histones (see MIM 142720). RNF168 is an E3 ubiquitin ligase critical for DSB repair (Stewart et al., 2009 [PubMed 19203578]).

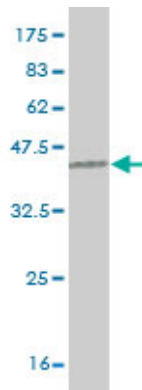
## References

---

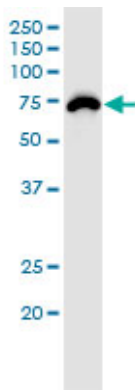
53BP1-dependent robust localized KAP-1 phosphorylation is essential for heterochromatic DNA double-strand break repair. Noon AT, et al. Nat Cell Biol, 2010 Feb. PMID 20081839. The RNF8/RNF168 ubiquitin ligase cascade facilitates class switch recombination. Ramachandran S, et al. Proc Natl Acad Sci U S

A, 2010 Jan 12. PMID 20080757. A viral E3 ligase targets RNF8 and RNF168 to control histone ubiquitination and DNA damage responses. Lilley CE, et al. EMBO J, 2010 Mar 3. PMID 20075863. RNF168, a new RING finger, MIU-containing protein that modifies chromatin by ubiquitination of histones H2A and H2AX. Pinato S, et al. BMC Mol Biol, 2009 Jun 5. PMID 19500350. RNF168 binds and amplifies ubiquitin conjugates on damaged chromosomes to allow accumulation of repair proteins. Doil C, et al. Cell, 2009 Feb 6. PMID 19203579.

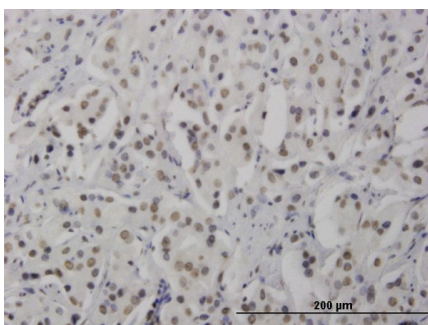
## Images



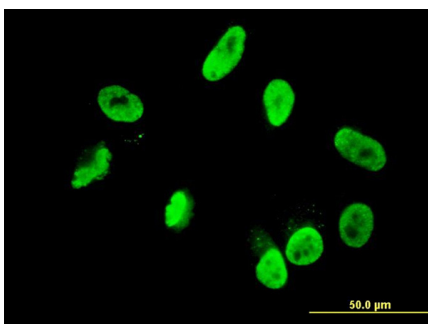
Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (37.84 KDa) .



RNF168 monoclonal antibody (M01), clone 3E1 Western Blot analysis of RNF168 expression in HepG2 (Cat # AT3669a )



Immunoperoxidase of monoclonal antibody to RNF168 on formalin-fixed paraffin-embedded human prostate cancer. [antibody concentration 1.5 ug/ml]



Immunofluorescence of monoclonal antibody to RNF168 on HepG2 cell. [antibody concentration 10 ug/ml]

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.