

Datasheet for ABIN7151156
anti-RNF168 antibody (AA 194-296)[Go to Product page](#)

1 Image

Overview

Quantity:	100 µg
Target:	RNF168
Binding Specificity:	AA 194-296
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This RNF168 antibody is un-conjugated
Application:	ELISA, Immunohistochemistry (IHC)

Product Details

Immunogen:	Recombinant Human E3 ubiquitin-protein ligase RNF168 protein (194-296AA)
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	>95%, Protein G purified

Target Details

Target:	RNF168
Alternative Name:	RNF168 (RNF168 Products)
Background:	Background: E3 ubiquitin-protein ligase required for accumulation of repair proteins to sites of DNA damage. Acts with UBE2N/UBC13 to amplify the RNF8-dependent histone ubiquitination.

Target Details

Recruited to sites of DNA damage at double-strand breaks (DSBs) by binding to ubiquitinated histone H2A and H2AX and amplifies the RNF8-dependent H2A ubiquitination, promoting the formation of 'Lys-63'-linked ubiquitin conjugates. This leads to concentrate ubiquitinated histones H2A and H2AX at DNA lesions to the threshold required for recruitment of TP53BP1 and BRCA1. Also recruited at DNA interstrand cross-links (ICLs) sites and promotes accumulation of 'Lys-63'-linked ubiquitination of histones H2A and H2AX, leading to recruitment of FAAP20/C1orf86 and Fanconi anemia (FA) complex, followed by interstrand cross-link repair. H2A ubiquitination also mediates the ATM-dependent transcriptional silencing at regions flanking DSBs in cis, a mechanism to avoid collision between transcription and repair intermediates. Also involved in class switch recombination in immune system, via its role in regulation of DSBs repair. Following DNA damage, promotes the ubiquitination and degradation of JMJD2A/KDM4A in collaboration with RNF8, leading to unmask H4K20me2 mark and promote the recruitment of TP53BP1 at DNA damage sites. Not able to initiate 'Lys-63'-linked ubiquitination in vitro, possibly due to partial occlusion of the UBE2N/UBC13-binding region. Catalyzes monoubiquitination of 'Lys-13' and 'Lys-15' of nucleosomal histone H2A (H2AK13Ub and H2AK15Ub, respectively).

Aliases: E3 ubiquitin protein ligase RNF168 antibody, E3 ubiquitin-protein ligase RNF168 antibody, FLJ35794 antibody, FLJ39749 antibody, hRNF168 antibody, RING finger protein 168 antibody, RN168_HUMAN antibody, RNF 168 antibody, Rnf168 antibody

UniProt: [Q8IYW5](#)

Pathways: [Production of Molecular Mediator of Immune Response](#)

Application Details

Application Notes: Recommended dilution: IHC:1:500-1:1000,

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: Preservative: 0.03 % Proclin 300
Constituents: 50 % Glycerol, 0.01M PBS, pH 7.4

Preservative: ProClin

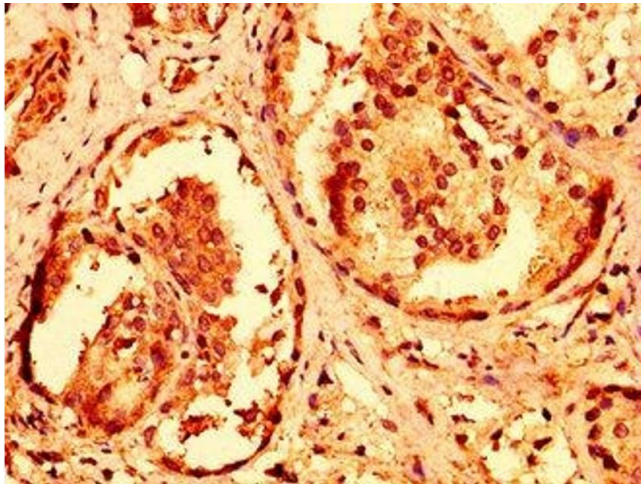
Precaution of Use: This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling

Storage: -20 °C, -80 °C

Storage Comment: Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



Immunohistochemistry

Image 1. IHC image of ABIN7151156 diluted at 1:600 and staining in paraffin-embedded human prostate cancer performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10 % normal goat serum 30 min at RT. Then primary antibody (1 % BSA) was incubated at 4 °C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.