

# **Human RNF8 Antibody**

Antigen Affinity-purified Polyclonal Sheep IgG Catalog Number: AF7114

DESCRIPTION		
Species Reactivity	Human	
Specificity	Detects human RNF8 in direct ELISAs and Western blots. In direct ELISAs, approximately 100% cross-reactivity with recombinant mouse RNF8 is observed.	
Source	Polyclonal Sheep IgG	
Purification	Antigen Affinity-purified	
Immunogen	E. coli-derived recombinant human RNF8 Met1-Val124 Accession # O76064	
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.	

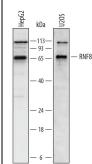
#### APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	1 μg/mL	See Below

# DATA

## Western Blot



Detection of Human RNF8 by Western Blot. Western blot shows lysates of HepG2 human hepatocellular carcinoma cell line and U2OS human osteosarcoma cell line. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human RNF8 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7114) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for RNF8 at approximately 65 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

# PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Neconstitution	oterne i bo to a iniai concentration of 0.2 mg/mb.

Shipping The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

\*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C

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- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

## BACKGROUND

RNF8 (RING [really interesting gene] finger protein 8; also E3 ubiquitin-protein ligase RNF8) is a 55-58 kDa member of the RNF8 family of proteins. It is ubiquitously expressed, and serves as an E3 ubiquitin ligase. RNF8 is recruited to DNA double-strand breaks by phosphoMDC1, where it promotes the ubiquitination of histones H2A and H2AX. This, in turn, may result in the recruitment of 53BP1, a scaffold protein that holds DNA damage response elements. Human RNF8 is 485 amino acids (aa) in length. It contains one forkhead associated domain (aa 38-92), a Gln-rich segment (aa 276-345), and one Zn-finger region (aa 403-441). There is one utilized phosphorylation site at Ser157. Two potential isoforms are reported. One shows an 18 aa substitution for aa 81-485, while another possesses a 36 aa substitution for aa 413-485. RNF8 apparently undergoes ubiquitination, generating multiple isoforms that run at 62-72 kDa in SDS-Page. Over aa 1-124, human RNF8 shares 74% aa identity with mouse RNF8.

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