

DESCRIPTION

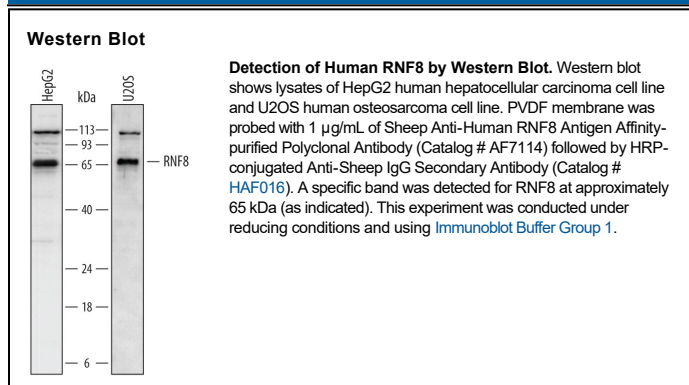
Species Reactivity	Human
Specificity	Detects human RNF8 in direct ELISAs and Western blots. In direct ELISAs, approximately 100% cross-reactivity with recombinant mouse RNF8 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human 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



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
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
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> 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.