

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
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

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

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

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.

PRODUCT SPECIFIC NOTICES

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