

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 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 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

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc., and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.