

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human RNF4 in direct ELISAs and Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human RNF4 Met1-Ile190 Accession # P78317
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.

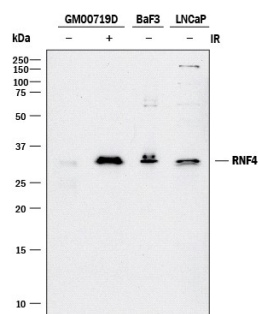
APPLICATIONS

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
Immunocytochemistry	1-15 µg/mL	See Below
Immunohistochemistry	1-15 µg/mL	See Below

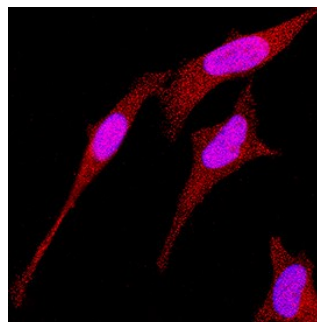
DATA

Western Blot



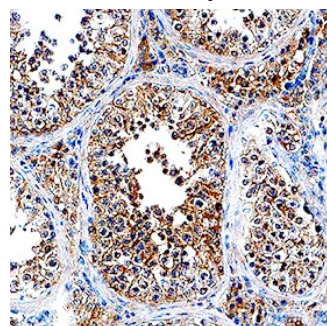
Detection of Human RNF4 by Western Blot. Western blot shows lysates of GM00719D human ataxia telangiectasia cell line either mock-treated (-) or exposed (+) to 10 Gy ionizing radiation (IR) and harvested after 1 hour, BaF3 mouse pro-B cell line, and LNCaP human prostate cancer cell line. PVDF membrane was probed with 1 µg/mL of Goat Anti-Human RNF4 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7964) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for RNF4 at approximately 34 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunocytochemistry



RNF4 in HeLa Human Cell Line. RNF4 was detected in immersion fixed HeLa human cervical epithelial carcinoma cell line using Goat Anti-Human RNF4 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7964) at 1.7 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized to nuclei and cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Immunohistochemistry



RNF4 in Human Testis. RNF4 was detected in immersion fixed paraffin-embedded sections of human testis using Goat Anti-Human RNF4 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7964) at 10 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific staining was localized to nuclei and cytoplasm. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
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

RNF4 (small nuclear ring finger protein, SNURF) is a RING-finger ubiquitin E3 ligase that ubiquitinates and mediates the proteasomal destruction of targets such as PML, PEA3, CENP1, and PARP1. In addition to the RING domain, RNF4 contains four SUMO-interacting motifs (SIMs) that function to recruit this ligase to poly-sumoylated substrates. RNF4 will autoubiquitinate in vitro, and will also ubiquitinate poly-SUMO chains.

References:

1. Geoffroy, M-C et al. (2010) Mol. Bio. Cell **21**: 4227
2. Tatham, M.H. et al. (2008) Nat. Cell Bio. **10**: 538