

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human GRAIL/RNF128 in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human GRAIL/RNF128 Val42-Pro161 Accession # Q8TEB7
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 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

GRAIL (Gene related to anergy in lymphocytes protein; also RNF128) is a 45-47 kDa, type I transmembrane E3 ubiquitin ligase. It is expressed in the endosomes of select cell types such as early myeloid progenitors and lymphocytes, and mediates the ubiquitination of membrane proteins such as CD3, CD40L, and CD83, plus the tetraspanins CD81 and CD151. GRAIL apparently regulates the threshold for T cell activation, and as such, plays a key role in autoimmunity. In Treg cells, GRAIL promotes suppressive activity by restricting Th17 gene expression. Mature human GRAIL is 390 amino acids (aa) in length (aa 39-428). It possesses a 169 aa luminal region (aa 39-207) and a 190 aa cytoplasmic domain. The luminal region contains one PA (protease-associated) domain that mediates protein-protein interactions (aa 48-193), and the cytoplasmic segment shows one zinc-finger region (aa 277-318). There is one splice variant that shows a 134 aa substitution for aa 1-161. Over aa 42-161, human GRAIL shares 98% aa identity with mouse GRAIL.

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.