

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human URB in direct ELISAs and Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human URB Met129-Tyr950 Accession # Q76M96
Conjugate	Alexa Fluor 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 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

URB (upregulated in BRS-3 deficient mice) is a 150 kDa, secreted glycoprotein that belongs to the sushi-repeat-containing protein superfamily (1, 2). Sushi repeats, otherwise known as short consensus repeats (SCRs), are 60 amino acid (aa) sequences usually involved in protein-protein interaction. They are characterized by the presence of four Cys, two Pro, one Gly and one Trp (3). Human URB is synthesized as a 950 aa precursor that contains a 21 aa signal sequence and a 929 aa mature region. The mature molecule contains three extended sushi/SCR domains of approximately 140 aa each. They bear resemblance to the fifth sushi-repeat in human SPRX (4). The three lie between aa 141-281, 615-760, and 771-913, respectively. Between the first and second SCR lie two amino acid-rich regions, a Thr-rich domain (aa 347-404), and a Lys-rich domain (aa 487-588). Three potential N-linked glycosylation sites exist in the last two SCR's, while six potential bipartite nuclear localization signals (NLS) occur between aa 420-780. There are two potential alternate splice forms for human URB. One is 594 aa in length, and shows a simple truncation at Ser594. This effectively removes the second and third SCRs and two bipartite NLS (5). The second is 553 aa in length and shows a simple truncation after Lys553. This eliminates four bipartite NLSs, the second and third SCRs, and part of the Lys-rich domain (6). Full-length human URB is 83%, 84% and 87% aa identical to rat, mouse and bovine URB, respectively. URB is found in chondrocytes and appears to be downregulated upon CFU-Fibroblast differentiation (1). Thus, it may play a role in skeletogenesis.

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.