

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human and mouse RNA Polymerase II/POLR2A in Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human RNA Polymerase II/POLR2A Leu15-Leu354 Accession # P24928
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

POLR2A (DNA-directed RNA Polymerase II subunit RPB1; also subunit A) is a 200-220 kDa member of the RNA polymerase β -chain family of proteins. It is ubiquitously expressed and represents the largest subunit of RNA polymerase II, the catalytic mechanism for the synthesis of mRNA. Human POLR2A is 1970 amino acids (aa) in length. It contains an N-terminus with six RNA polymerase domains (aa 15-1079), and a C-terminus (CTD) with 52 seven aa repeats (-YSPTSPS-) that serve as a platform for polymerase subunit interaction. When these sequences are hyperphosphorylated, this subunit is called RNA pol II α ; when hypophosphorylated, the subunit becomes RNA pol II β . Isoforms exist that show a 60 aa substitution for aa 1-95, a 24 aa substitution for aa 1-445, and an Arg substitution for aa 1498-1536. Full-length human and mouse POLR2A sequences differ by only one amino acid (Thr1856Ala).

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.