

DESCRIPTION

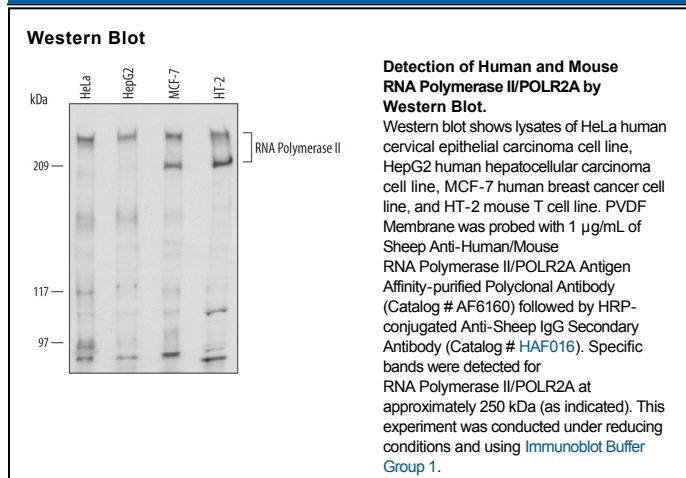
Species Reactivity	Human/Mouse
Specificity	Detects human and mouse RNA Polymerase II/POLR2A in Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human RNA Polymerase II/POLR2A Leu15-Leu354 Accession # P24928
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied 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

DATA



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

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_o; when hypophosphorylated, the subunit becomes RNA pol II_a. 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).