

## Product datasheet for **CF809994**

### **POLR2A Mouse Monoclonal Antibody [Clone ID: OTI1E5]**

#### **Product data:**

<b>Product Type:</b>	Primary Antibodies
<b>Clone Name:</b>	OTI1E5
<b>Applications:</b>	IHC, WB
<b>Recommended Dilution:</b>	WB 1:2000, IHC 1:500
<b>Reactivity:</b>	Human, Mouse, Rat
<b>Host:</b>	Mouse
<b>Isotype:</b>	IgG1
<b>Clonality:</b>	Monoclonal
<b>Immunogen:</b>	Human recombinant protein fragment corresponding to amino acids 1351-1614 of human POLR2A(NP_000928) produced in E.coli.
<b>Formulation:</b>	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
<b>Reconstitution Method:</b>	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
<b>Purification:</b>	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
<b>Conjugation:</b>	Unconjugated
<b>Storage:</b>	Store at -20°C as received.
<b>Stability:</b>	Stable for 12 months from date of receipt.
<b>Gene Name:</b>	RNA polymerase II subunit A
<b>Database Link:</b>	<a href="#">NP_000928</a> <a href="#">Entrez Gene 20020 Mouse</a> <a href="#">Entrez Gene 363633 Rat</a> <a href="#">Entrez Gene 5430 Human</a> <a href="#">P24928</a>



[View online »](#)

**Background:**

This gene encodes the largest subunit of RNA polymerase II, the polymerase responsible for synthesizing messenger RNA in eukaryotes. The product of this gene contains a carboxy terminal domain composed of heptapeptide repeats that are essential for polymerase activity. These repeats contain serine and threonine residues that are phosphorylated in actively transcribing RNA polymerase. In addition, this subunit, in combination with several other polymerase subunits, forms the DNA binding domain of the polymerase, a groove in which the DNA template is transcribed into RNA. [provided by RefSeq, Jul 2008]

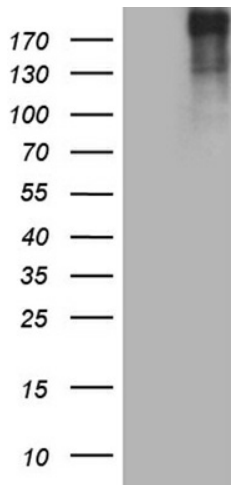
**Synonyms:**

hrPB220; hsRPB1; POLR2; POLRA; RPB1; RPBh1; RpIILS; RPO2; RPOL2

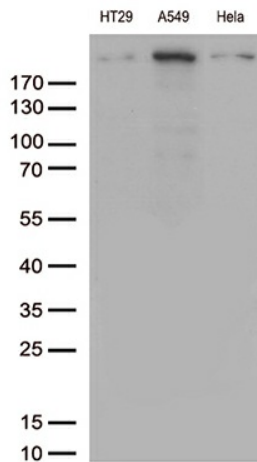
**Protein Pathways:**

Huntington's disease, Metabolic pathways, Purine metabolism, Pyrimidine metabolism, RNA polymerase

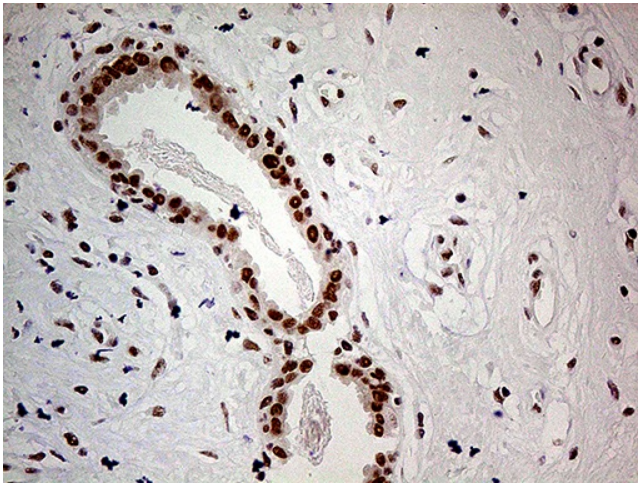
**Product images:**



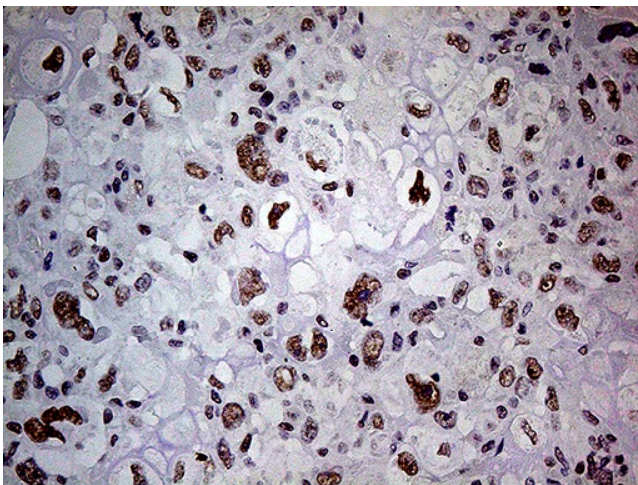
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY POLR2A ([RC216765], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-POLR2A (1:2000).



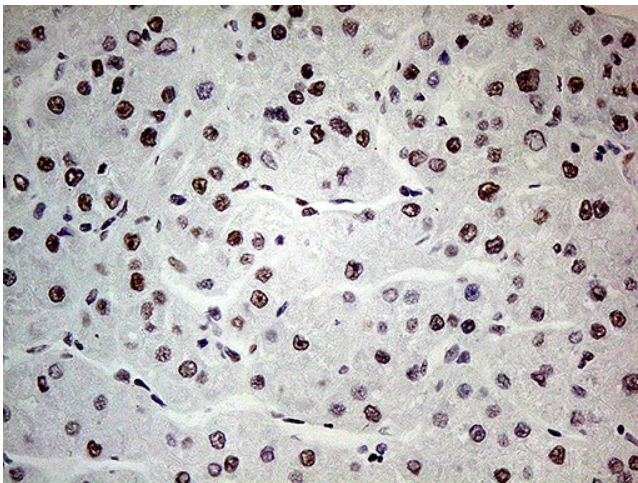
Western blot analysis of extracts (35ug) from 3 different cell lines by using anti-POLR2A monoclonal antibody. 1:500`



Immunohistochemical staining of paraffin-embedded Human breast tissue within the normal limits using anti-POLR2A mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

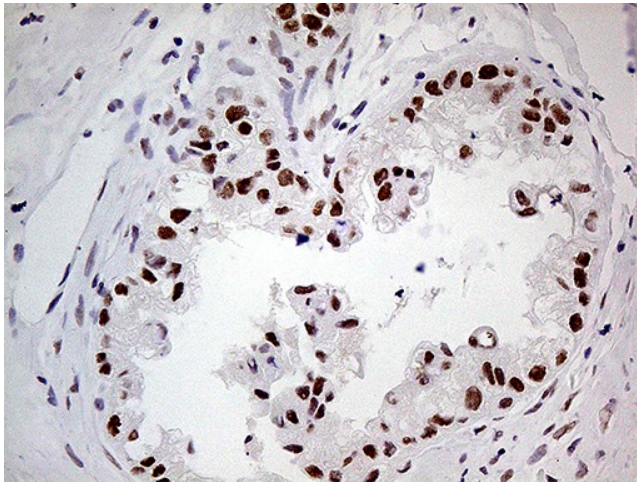


Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human breast tissue tissue using anti-POLR2A mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

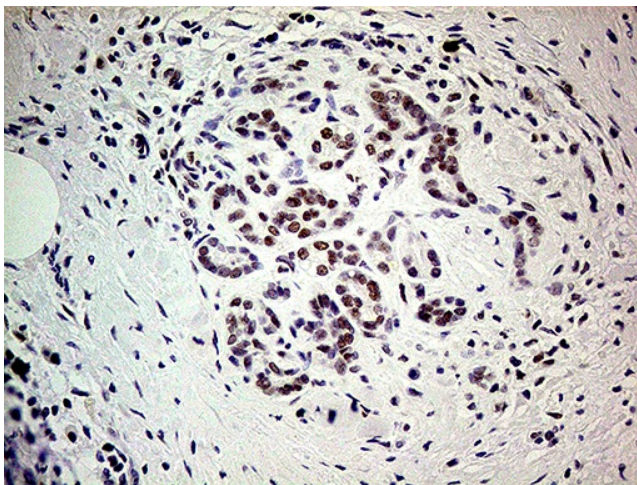


Immunohistochemical staining of paraffin-embedded Human liver tissue within the normal limits using anti-POLR2A mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

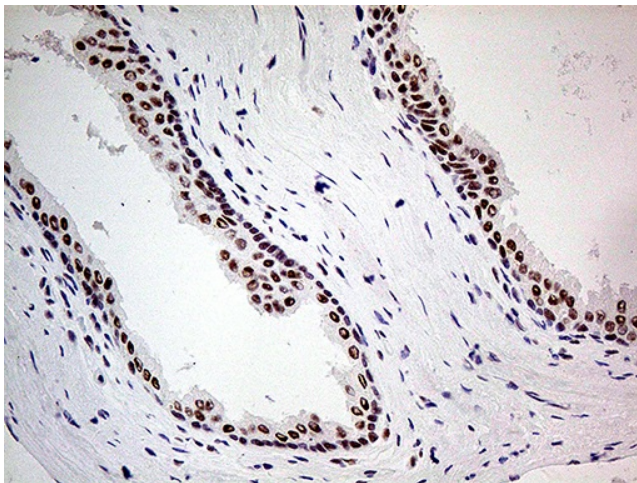




Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human ovary tissue using anti-POLR2A mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Human pancreas tissue within the normal limits using anti-POLR2A mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Carcinoma of Human prostate tissue using anti-POLR2A mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.