

Product datasheet for **AP21068PU-M**

POLR3A Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	Western blot: 1/500-1/1000. Immunohistochemistry on Paraffin Sections: 1/50-1/200.
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Specificity:	This antibody detects endogenous levels of POLR3A protein. (region surrounding Pro68)
Formulation:	Phosphate buffered saline (PBS), pH~7.2 State: Aff - Purified State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE) Preservative: 0.05% Sodium Azide
Concentration:	1.0 mg/ml
Purification:	Affinity Chromatography using epitope-specific immunogen
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 156 kDa
Gene Name:	polymerase (RNA) III subunit A
Database Link:	<u>Entrez Gene 218832 Mouse</u> <u>Entrez Gene 11128 Human</u> <u>O14802</u>



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Background:

RNA polymerase III (Pol III) is a multi-subunit complex responsible for catalyzing the transcription of DNA into RNA. POLR3A (polymerase (RNA) III (DNA directed) polypeptide A), also known as RPC1 or RPC155, is a 1,390 amino acid protein that localizes to the nucleus and belongs to the RNA polymerase β chain family. Existing as the largest and catalytic core component of Pol III, POLR3A functions as a DNA-dependent RNA polymerase that catalyzes the conversion of a nucleoside triphosphate into a diphosphate, thereby transcribing DNA into RNA. The gene encoding POLR3A maps to human chromosome 10, which houses over 1,200 genes and comprises nearly 4.5% of the human genome. Defects in some of the genes that map to chromosome 10 are associated with Charcot-Marie Tooth disease, Jackson-Weiss syndrome, Usher syndrome, nonsyndromic deafness, Wolmans syndrome, Cowden syndrome, multiple endocrine neoplasia type 2 and porphyria.

Synonyms:

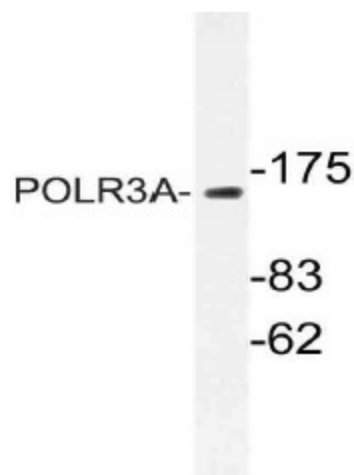
RNA polymerase III subunit C1, RPC1, RPC155

Protein Families:

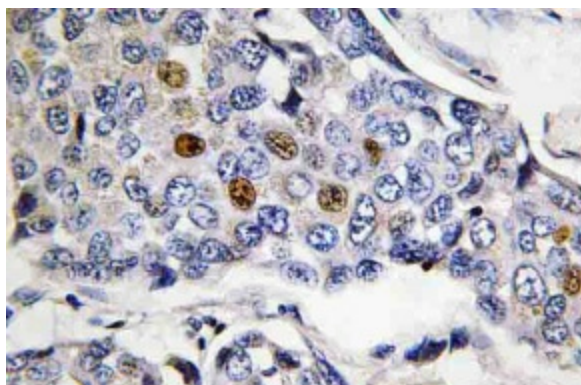
Transcription Factors

Protein Pathways:

Cytosolic DNA-sensing pathway, Metabolic pathways, Purine metabolism, Pyrimidine metabolism, RNA polymerase

Product images:


Western blot (WB) analysis of POLR3A antibody (Cat.-No.: [AP21068PU-N]) in extracts from HUVEC cells.



Immunohistochemistry (IHC) analyzes of POLR3A antibody (Cat.-No.: [AP21068PU-N]) in paraffin-embedded human breast carcinoma tissue.