

## Recombinant Human POLR2D, His-tagged

**Cat. No.** POLR2D-15909H    **Lot. No.** (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                          |
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| <b>Product Overview</b> | Recombinant human POLR2D protein, fused to His tag at N-terminus, was expressed in E.coli.                                                                                                                                                                                                                                                                                                               |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Source</b>           | E.coli                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>ProteinLength</b>    | 1-142aa                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Description</b>      | POLR2D is the fourth largest subunit of RNA polymerase II, the polymerase responsible for synthesizing messenger RNA in eukaryotes. In yeast, this polymerase subunit is associated with the polymerase under suboptimal growth conditions and may have a stress protective role. A sequence for a ribosomal pseudogene is contained within the 3' untranslated region of the transcript from this gene. |
| <b>Form</b>             | Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 0.4M Urea 10% glycerol                                                                                                                                                                                                                                                                                                                               |
| <b>Molecular Mass</b>   | 18.7 kDa (165aa)                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>AA Sequence</b>      | MGSSHHHHH SSGLVPRGSH MGSMAGGSD PRAGDVEEDA SQLIFPKEFE<br>TAETLLNSEV HMLLEHRKQQ NESAEDEQEL SEVFMKTLNY TARFSRFGNR<br>ETIASVRSLL LQKKLHKFEL ACLANLCPET AEESKALIPS LEGRFEDEEL<br>QQILDDIQTK RSFQY                                                                                                                                                                                                             |
| <b>Purity</b>           | >90% by SDS - PAGE                                                                                                                                                                                                                                                                                                                                                                                       |

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|                            |                                                                                                                                                                                                                                                                                                                                    |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Applications</b>        | SDS-PAGE                                                                                                                                                                                                                                                                                                                           |
| <b>Storage</b>             | Can be stored at 4°C short term. For long term storage, aliquot and store at at -20°C or -70°C. Avoid repeated freezing and thawing cycles.                                                                                                                                                                                        |
| <b>Concentration</b>       | 1.0 mg/ml (determined by Bradford assay)                                                                                                                                                                                                                                                                                           |
| <b>GENE INFORMATION</b>    |                                                                                                                                                                                                                                                                                                                                    |
| <b>Gene Name</b>           | POLR2D polymerase (RNA) II (DNA directed) polypeptide D [ Homo sapiens ]                                                                                                                                                                                                                                                           |
| <b>Official Symbol</b>     | POLR2D                                                                                                                                                                                                                                                                                                                             |
| <b>Synonyms</b>            | POLR2D; polymerase (RNA) II (DNA directed) polypeptide D; DNA-directed RNA polymerase II subunit RPB4; RBP4; RNA polymerase II subunit hsRBP4; RNA polymerase II subunit B4; RNA polymerase II 16 kDa subunit; DNA-directed RNA polymerase II subunit D; DNA-directed RNA polymerase II 16 kDa polypeptide; RPB16; HSRBP4; HSRPB4; |
| <b>Gene ID</b>             | 5433                                                                                                                                                                                                                                                                                                                               |
| <b>mRNA Refseq</b>         | NM_004805                                                                                                                                                                                                                                                                                                                          |
| <b>Protein Refseq</b>      | NP_004796                                                                                                                                                                                                                                                                                                                          |
| <b>MIM</b>                 | 606017                                                                                                                                                                                                                                                                                                                             |
| <b>UniProt ID</b>          | O15514                                                                                                                                                                                                                                                                                                                             |
| <b>Chromosome Location</b> | 2q21                                                                                                                                                                                                                                                                                                                               |

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**Pathway**

Abortive elongation of HIV-1 transcript in the absence of Tat, organism-specific biosystem; DNA Repair, organism-specific biosystem; Disease, organism-specific biosystem; Dual incision reaction in TC-NER, organism-specific biosystem; Formation of HIV-1 elongation complex containing HIV-1 Tat, organism-specific biosystem; Formation of HIV-1 elongation complex in the absence of HIV-1 Tat, organism-specific biosystem; Formation of RNA Pol II elongation complex, organism-specific biosystem;

**Function**

DNA-directed RNA polymerase activity; catalytic activity; nucleotide binding; contributes\_to protein kinase activity;

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