

# **Bioworld Technology CO., Ltd.**

# POLR2J1 (D24) Peptide

Cat No.: BS3853P

# **Background**

Three genes (POLR2 J1, POLR2 J2, and POLR2 J3) form a cluster of total length of 214 530 bp in the genetic locus 7q22.1 on the long arm of chromosome 7 (contig NT\_007933). The fourth gene (POLR2 J4, 31 040 bp) was localized in the cytogenetic locus 7p13 of the short arm of chromosome 7 (contig NT\_007819). An analysis enabled us to refine dissimilar experimental data on the mapping of the hRPB11 subunit gene on chromosome 7. In particular, the presence of three sites of its localization according to data on hybridization with fluorescent-labeled probes (the FISH method) was explained. It was established that, upon the expression of the four human POLR2 J genes, at least 14 types of mature mRNAs encoding somewhat differing hRPB11 isoforms can be synthesized. Eleven of these mRNAs were revealed (as full-length copies or clearly identifiable fragments) in the available databases of expressed sequence tags and cDNAs. The most probable scheme of origination of the multiple genes of the POLR2 J family as a result of three consecutive segmented duplications increasing in size was proposed and substantiated. On the basis of the scheme, some assumptions on the pathways of evolution of separate human genes and the mechanisms of generation of protein diversity in higher eukaryotes were made

**Swiss-Prot** 

P52435

**Applications** 

Blocking

**Specificity** 

This peptide can be used with studies using BS3853 POLR2J1 (D24) pAb.

**Purification & Purity** 

Synthetic peptide POLR2J1 (D24). (Note: the amino acid sequence is proprietary). The purity is > 98%.

#### **Product**

1 mg/ml in DI water.

# **Storage & Stability**

Store at  $4\,\mathrm{C}$  short term. Aliquot and store at  $-20\,\mathrm{C}$  long term. Avoid freeze-thaw cycles.

# **Research Use**

For research use only, not for use in diagnostic procedure.