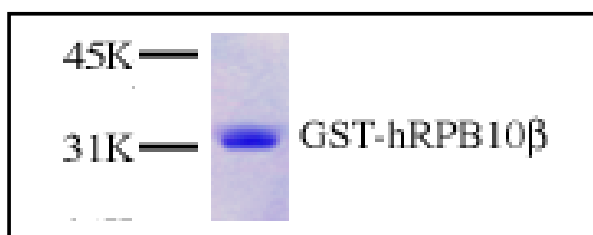


RNA pol II-hRPB12^{GST} RNA Polymerase II, RPB12 subunit human, recombinant, *E. coli*

Cat. No.	Amount
PR-795	10 µg



For *in vitro* use only
Quality guaranteed for 12 months
Store at -80°C

Avoid freeze / thaw cycles

Form

Liquid. Supplied in 20 mM Tris-HCl pH 8.0, 100 mM KCl, 0.2 mM EDTA, 1 mM DTT and 20% glycerol.

Activity

100 ng are sufficient for a protein-protein interaction assay.

Purity

>95% by SDS-PAGE

Description

RPB12 (also called RPB10β) is shared between all three RNA Polymerases and is homologous to the archaeal P subunit of RNA polymerase. Like RPB10α, it is essential for yeast cell viability. RPB12 is also a zinc-binding protein with a canonical tetra-coordinating zinc motif and but binds zinc *in vitro* much less efficiently than the RPB10α subunit. It has been shown to interact with both RPB1 and RPB2 *in vitro* and the human subunit can functionally substitute for its yeast counterpart.

Recombinant RPB12 is isolated from an *E. coli* strain that carries the coding sequence of human RPB10α under the control of a T7 promoter.

hRPB12 has been applied in protein-protein interaction assays.

Selected References:

- Werner *et al.* (2000) Archaeal RNA polymerase subunits F and P are bona fide homologs of eukaryotic RPB4 and RPB12. *Nucleic Acids Res.* **28**:4299.
- Woychik *et al.* (1990) RNA polymerase II subunit RPB10 is essential for yeast cell viability. *J. Biol. Chem.* **265**:17816.
- Carles *et al.* (1991) Two additional common subunits, ABC10 alpha and ABC10 beta, are shared by yeast RNA polymerases. *J. Biol. Chem.* **266**:24092.
- Ishiguro *et al.* (1998) Two large subunits of the fission yeast RNA polymerase II provide platforms for the assembly of small subunits. *J. Mol. Biol.* **279**:703.
- McKune *et al.* (1995) Six human RNA polymerase subunits functionally substitute for their yeast counterparts. *Mol. Cell. Biol.* **15**:6895.