

Product no **AS11 1804****Anti-RPB1 | RNA polymerase II subunit B1****Product information**

**Immunogen** | KLH-conjugated synthetic peptide derived from known higher plant polymerase II sequences, including *Arabidopsis thaliana* P18616, At4g35800

**Host** | Rabbit

**Clonality** | Polyclonal

**Purity** | Immunogen affinity purified serum in PBS pH 7.4.

**Format** | Lyophilized

**Quantity** | 50 µg

**Reconstitution** | For reconstitution add 50 µl of sterile water

**Storage** | Store lyophilized/reconstituted at -20°C; once reconstituted make aliquots to avoid repeated freeze-thaw cycles. Please remember to spin the tubes briefly prior to opening them to avoid any losses that might occur from material adhering to the cap or sides of the tube.

**Additional information** | Purified IgG was lyophilized from PBS pH 7,4 + 0,02 % sodium azide, Therefore only distilled water is required for its re-constitution

**Application information**

**Recommended dilution** | 1,2 or 5 µg (ChIP, IP)

**Expected | apparent MW** | 204 kDa

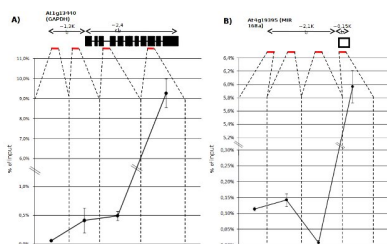
**Confirmed reactivity** | *Arabidopsis thaliana*

**Predicted reactivity** | *Amygdalus persica*, *Asparagus officinalis*, *Brassica rapa*, *Capsella rubella*, *Glycine max*, *Hordeum vulgare*, *Solanum lycopersicum*, *Oryza glaberrima*, *Panicum italicum*, *Persea americana*, *Pisum sativum*, *Ricinus communis*, *Secale cereale*, *Solanum tuberosum*, *Sorghum vulgare*, *Triticum aestivum*, *Vitis vinifera*  
Species of your interest not listed? [Contact us](#)

**Not reactive in** | *Physcomitrium patens*

**Additional information** | This antibody is not suitable for western blot in denatured conditions

**Selected references** | [Crawford et al. \(2024\)](#). The Mediator kinase module enhances polymerase activity to regulate transcriptional memory after heat stress in *Arabidopsis*. *EMBO J.* 2024 Feb;43(3):437-461.  
[Wang et al. \(2020\)](#). Close arrangement of CARK3 and PMEIL affects ABA-mediated pollen sterility in *Arabidopsis thaliana*. *Plant Cell Environ.* 2020 Aug 20. doi: 10.1111/pce.13871.  
[Godoy Herz et al. \(2019\)](#). Light Regulates Plant Alternative Splicing through the Control of Transcriptional Elongation. *Mol Cell.* 2019 Jan 15. pii: S1097-2765(18)31035-9. doi: 10.1016/j.molcel.2018.12.005.  
[Dolata et al. \(2015\)](#). NTR1 is required for transcription elongation checkpoints at alternative exons in *Arabidopsis*. *EMBO J.* 2015 Jan 7. pii: e201489478.

**Application example**

**Chromatin immunoprecipitation (ChIP).** Chromatin immunoprecipitation was performed as described ([Bowler et al. \(2004\)](#), *Plant Journal*) with modifications. Sonic and IP buffer were prepared as described ([Kaufmann et al. \(2010\)](#)), *Nature Protocols*. Chromatin pellet was sonicated at 4 °C with a Diagenode Bioruptor set at high intensity for 10 min (30 sec on, 30 sec off intervals) to obtain 250-500 bp DNA fragments. Chromatin (20 µg) was immunoprecipitated with a RNA Pol II antibody (2µg/IP) and Dynabeads®Protein G (Life Technologies). Reverse crosslinking and elution of DNA fragments were performed using Chelex (Biorad) at 95°C, 10 min as described ([Rowley et al. \(2013\)](#), *Methods*). Sample without antibody was used to determine the nonspecific background pulled-down directly by the beads. Relative abundance of regions of interest in

immunoprecipitated DNA was measured by real-time PCR. Red lines indicates amplified region. Values on the charts are shown as the mean  $\pm$  SD level (% of input) of RNA Pol II on GAPDH gene (A) and MIR168a (B) gene. Data comes from three independent experiments.

Courtesy of MSc Jakub Dolata, Adam Mickiewicz University, Poland