

Product no **AS07 208****Anti-PR-2 | GLU I | Class I beta-1,3-glucanase****Product information**

Immunogen Purified tobacco class I, basic β -1,3-glucanase. Purified GLU I consists of a mixture of closely related polypeptides encoded by a family of GLU I genes comprising GLA [B5APL3](#) derived from the sylvestris ancestor of tobacco, GLB [P27666](#) derived from the tomentosiformis ancestor of tobacco and homeologous recombinants (Sperisen et al., 1991). Mature GLU I is processed from a pre-pro-polypeptide (Shinshi et al., 1988).

Host Rabbit

Clonality Polyclonal

Purity Total IgG in PBS pH 7.4. (without Ca⁺⁺).

Format Lyophilized

Quantity 2 mg

Reconstitution For reconstitution add 100 μ l 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 For more details on immunolocalization, please refer to Keefe et al (1990). Plant 182: 43-51.

This antibody can be used as a marker of vacuolar contents [Keefe et al. \(1990\)](#). The effect of ethylene on the cell-type-specific and intracellular localization of β -1,3-glucanase and chitinase in tobacco leave. Plant 182: 43-51.

Application information

Recommended dilution 8 μ g/ml (WB)

Expected | apparent MW 37 | 33 kDa

Confirmed reactivity *Fragaria vesca*, *Lactuca sativa*, *Nicotiana benthamiana*, *Nicotiana clevelandii*, *Nicotiana glutinosa*, *Nicotiana tabacum*, *Phalenopsis* Sogo Yukidian cultivar V3, *Populus sp.*, *Solanum lycopersicum*, *Solanum tuberosum*, *Vitis vinifera*

Predicted reactivity Dicots, *Oryza sativa*, *Prunus persica*

Species of your interest not listed? [Contact us](#)

Not reactive in *Arabidopsis thaliana*

Additional information Important note: for blocking 5 % skim milk in PBS without Ca⁺⁺ should be used.

This antibody is purified by affinity chromatography on Protein G.

Selected references [Shi et al. \(2025\)](#). Identification of an ethylene-responsive and cell wall-secreting β -1,3-glucanase, VvGLU1, in the early cell regrowth of grape winter buds triggered by exogenous dormancy releasers. BMC Biol. 2025 Jan 23;23(1):22. doi: 10.1186/s12915-025-02120-2.

[Li et al. \(2021\)](#) Penicillium chrysogenum polypeptide extract protects Nicotiana benthamiana against TMV infection through modulation of ABA biosynthesis and callose priming. J Exp Bot. 2021 Mar 4;erab102. doi: 10.1093/jxb/erab102. Epub ahead of print. PMID: 33687058. (Immunolocalization)

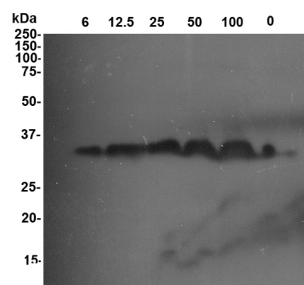
[Colman et al. \(2019\)](#). Chitosan microparticles improve tomato seedling biomass and modulate hormonal, redox and defense pathways. Plant Physiology and Biochemistry. Volume 143, October 2019, Pages 203-211.

[Martin-Saladana et al. \(2018\)](#). Salicylic acid loaded chitosan microparticles applied to lettuce seedlings: Recycling shrimp fishing industry waste. Carbohydrate Polymers Volume 200, 15 November 2018, Pages 321-331.

[Wang et al. \(2014\)](#). Elicitation of Hypersensitive Responses in Nicotiana glutinosa by the Suppressor of RNA Silencing Protein P0 from Poleroviruses. Mol Plant Pathol. 2014 Sep 4. doi: 10.1111/mpp.12201.

[Huey-wen et al. \(2014\)](#). Harpin Protein, an Elicitor of Disease Resistance, Acts as a Growth Promoter in Phalaenopsis Orchids. Journal of Plant Growth Regulation May 2014.

Application example



Detection of tobacco tobacco class I β 1,3 – glucanase in ng loaded per respective well using anti- tobacco class I β 1,3 – glucanase antibodies. Primary antibodies have been used at 8 μ g/ml.