

Product no **AS07 207****PR-3 / CHN | Class I chitinase****Product information**

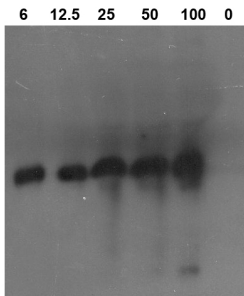
<b>Immunogen</b>	Purified tobacco class I chitinase. The preparation used is a mixture of two class I isoforms (Shinshi et al., 1990; van Buuren et al., 1992): 1) Chitinase A (CHN A) <a href="#">P08252</a> encoded by gene chn48 derived from the <i>N. tomentosiformis</i> ancestor of tobacco. 2) Chitinase B (CHN B) <a href="#">P24091</a> encoded by gene chn50 derived from the <i>N. sylvestris</i> ancestor of tobacco.
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Purity</b>	Total IgG. Protein G purified in PBS pH 7.4.
<b>Format</b>	Lyophilized
<b>Quantity</b>	2 mg
<b>Reconstitution</b>	For reconstitution add 100 µl of sterile water
<b>Storage</b>	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** Antibody is recognizing closely related tobacco class I isoforms: endochitinase A CHN-A (ca. 34 kDa) and endochitinase B CHN-B (ca. 32 kDa)  
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 -1,3-glucanase and chitinase in tobacco leave. *Plant* 182: 43-51.

**Application information**

<b>Recommended dilution</b>	8 µg/ml (WB)
<b>Expected   apparent MW</b>	35, 34   32 and 34 kDa
<b>Confirmed reactivity</b>	<i>Agostis stolonifera</i> cv. 'Penncross', <i>Capsicum annuum</i> , <i>Nicotiana tabacum</i> , <i>Picea abies</i> , <i>Solanum esculentum</i> , <i>Solanum lycopersicum</i> , <i>Solanum tuberosum</i> , <i>Vitis vinifera</i>
<b>Predicted reactivity</b>	<i>Arabidopsis thaliana</i> , <i>Manihot esculenta</i> , <i>Zea mays</i> Species of your interest not listed? <a href="#">Contact us</a>
<b>Not reactive in</b>	No confirmed exceptions from predicted reactivity are currently known
<b>Additional information</b>	Important note: For blocking 5% skim milk in PBS without Ca <sup>++</sup> should be used. This antibody is purified by affinity chromatography on Protein G.
<b>Selected references</b>	<a href="#">Mansilla et al. (2020)</a> .- Characterization of functionalized bentonite as nanocarrier of salicylic acid with protective action against <i>Pseudomonas syringae</i> in tomato plants. <i>Eur J Plant Pathol</i> 158, 211?222 (2020). <a href="https://doi.org/10.1007/s10658-020-02067-w">https://doi.org/10.1007/s10658-020-02067-w</a> <a href="#">Colman et al. (2019)</a> . Chitosan microparticles improve tomato seedling biomass and modulate hormonal, redox and defense pathways. <i>Plant Physiology and Biochemistry</i> Volume 143, October 2019, Pages 203-211. <a href="#">Kumari et al. (2017)</a> , Overexpression of a Plasma Membrane Bound Na <sup>+</sup> /H <sup>+</sup> Antiporter-Like Protein (SbNHXLPL) Confers Salt Tolerance and Improves Fruit Yield in Tomato by Maintaining Ion Homeostasis. <i>Front Plant Sci.</i> 2017 Jan 6;7:2027. doi: 10.3389/fpls.2016.02027. <a href="#">Jespersen et al. (2017)</a> . Metabolic Effects of Acibenzolar-S-Methyl for Improving Heat or Drought Stress in Creeping Bentgrass. <i>Front Plant Sci.</i> 2017 Jul 11;8:1224. doi: 10.3389/fpls.2017.01224. eCollection 2017. (western blot, <i>Agostis stolonifera</i> cv. ?Penncross?) <a href="#">Ko et al. (2016)</a> . Constitutive expression of a fungus-inducible carboxylesterase improves disease resistance in transgenic pepper plants. <i>Planta.</i> 2016 Aug; 244(2):379-92. doi: 10.1007/s00425-016-2514-6. Epub 2016 Apr 13.

## Application example



Detection of tobacco chitinase I in ng loaded per respective well using anti-tobacco chitinase I antibodies. Primary antibodies have been used at 8  $\mu\text{g/ml}$ .