

product **AS07 208**
GLU I | PR-2 class I beta-1,3-glucanase

product information

background	Pathogenesis-related (PR) proteins, are induced in response to the infection of plants with microbial pathogens. Combinations of glucanase I and chitinase I are potent inhibitors of fungal growth in vitro however precise mechanism of that is still not known. Glucanase I (PR-2) and chitinase I (PR-3) contribute to defense against fungal infection and are currently used as markers for innate immunity, and in particular the ethylene/jasmonate signalling pathway in pathogenesis. Alternative names of the protein: The basic, vacuolar isoforms of tobacco glucan endo-1,3- β -glucosidase; basic tobacco β -1,3-glucanase; PR-2
immunogen	purified tobacco class I β -1,3-glucanase Q42944
antibody format	rabbit polyclonal affinity purified total IgG in PBS pH 7.4 (without Ca++) lyophilized
quantity	2 mg 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 tubes briefly prior to opening them to avoid any losses that might occur from lyophilized material adhering to the cap or sides of the tubes.
tested applications	western blot (WB), immunolocalization (IL)
additional information	for more details on immunolocalization, please refer to Keefe et al (1990). Plant 182: 43-51

application information

recommended dilution	8 μ g/ml with standard ECL (WB)
expected apparent MW	37 33 kDa
confirmed reactivity	<i>Nicotiana tabacum</i> , <i>Populus sp.</i>
predicted reactivity	dicots including: <i>Glycine max</i> , monocots including: <i>Zea mays</i>
not reactive in	<i>Arabidopsis thaliana</i>
additional information	Important note: for blocking 5 % skim milk in PBS without Ca++ should be used
selected references	Sticher, L., Hinz, U., Meyer, A.D., and Meins, F. Jr. (1992). Intracellular transport and processing of a tobacco vacuolar β-1,3-glucanase. <i>Planta</i> 188, 559-565. Beffa et al. (1993). Physiological compensation in antisense transformants: Specific induction of an ersatz glucan endo-1,3-β-glucosidase in plants infected with necrotizing viruses. <i>Proc. Natl. Acad. Sci. U. S. A</i> 90, 8792-8796.

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.

