

product **AS08 322**

**Exo1 | exoglucanase isoenzyme 1**

### product information

<b>background</b>	<b>Family 3 beta-d-glucan glucohydrolases</b> are widely distributed in higher plants. The enzymes catalyse the hydrolytic removal of beta-d-glucosyl residues from non-reducing termini of a range of beta-d-glucans and beta-d-oligoglucosides. Their broad specificity can be rationalized from X-ray crystallographic data obtained from a <a href="#">barley beta-d-glucan glucohydrolase</a> in complex with non-hydrolysable S-glycoside substrate analogues, and from molecular modelling of enzyme-substrate complexes. The glucosyl residue occupying binding subsite -1 is tightly locked into a fixed position through extensive hydrogen bonding with six amino acid residues near the bottom of an active site pocket. In contrast, the glucosyl residue at subsite +1 is located between two tryptophan residues at the entrance of the pocket, where it is less tightly constrained. The relative flexibility of binding at subsite +1, coupled with the projection of the remainder of bound substrate away from the enzyme's surface, means that the overall active site can accommodate a range of substrates with variable spatial dispositions of adjacent beta-d-glucosyl residues. The broad specificity for glycosidic linkage type would enable the enzyme to perform diverse functions during plant development.
<b>immunogen</b>	synthetic peptide conjugated to <a href="#">KLH</a>
<b>antibody format</b>	rabbit; polyclonal; serum; lyophilized
<b>quantity</b>	100 µl - 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 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.
<b>tested applications</b>	Western blot (WB), ELISA (ELISA)
<b>additional information</b>	to be added when available

### application information

<b>recommended dilution</b>	1: 5 000 with standard ECL (WB) , 1: 10 000 (ELISA)
<b>expected   apparent MW</b>	66 kDa

<b>confirmed reactivity</b>		<i>Hordeum vulgare</i>
<b>predicted reactivity</b>		<i>Oryza sativa, Zea mays</i>
<b>not reactive in</b>		no confirmed exceptions from predicted reactivity known in the moment
<b>additional information</b>		to be added when available
<b>selected references</b>		to be added when available