

Supplemental Figure S1. Amino acid sequence alignment of the pepper peroxidase CaPO2 with peroxidases from wood tobacco (*Nicotiana sylvestris*, accession no. B56555), witchweed (*Striga asiatica*, accession no. AAB97853), skullcap (*Scutellaria baicalensis*, accession no. BAA77388), Arabidopsis (*Arabidopsis thaliana*, accession no. NP\_172907), rice (*Oryza sativa*, accession no. S22087), asparagus (*Asparagus officinalis*, accession no. CAD67479), wheat (*Triticum aestivum*, accession no. CAA59487), and pepper (*Capsicum annuum*, accession no. AAL35364). Identical amino acid residues are shaded in black. The putative signal peptide sequence cleavage site is marked with a reversed triangle above the sequence (▼). Dashes indicate the spacing in the amino acid sequences for proper alignment. Four conserved disulfide bridges are indicated by overlines. The plant cell wall peroxidase conserved domain, peroxidase active site and proximal heme-ligand are indicated by dashed lines.