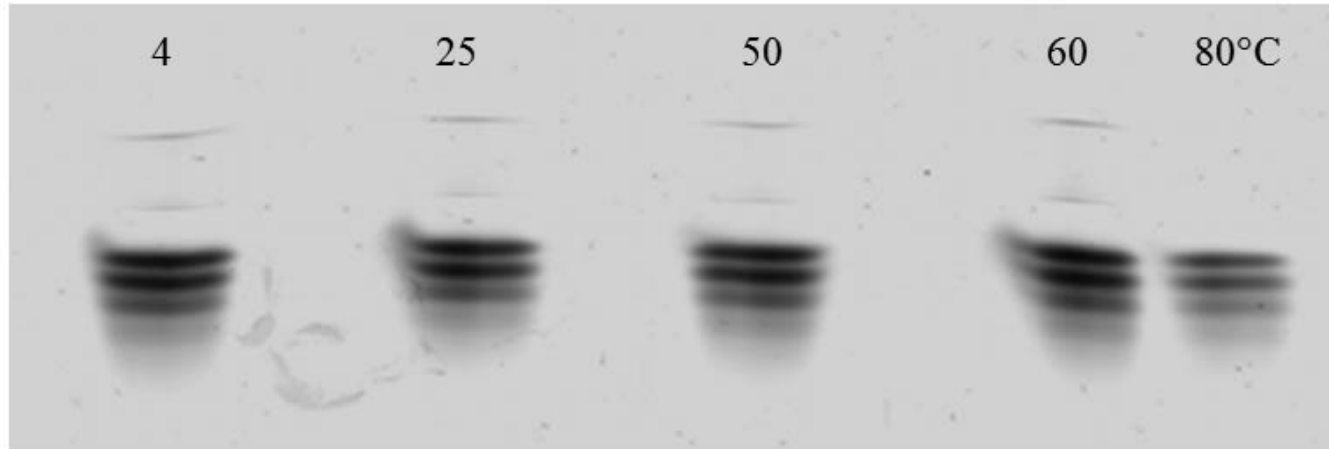


**Cell wall bound cationic and anionic class III isoperoxidases of
pea root – biochemical characterisation and function in root
growth**

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Supplementary Material

A)



B)

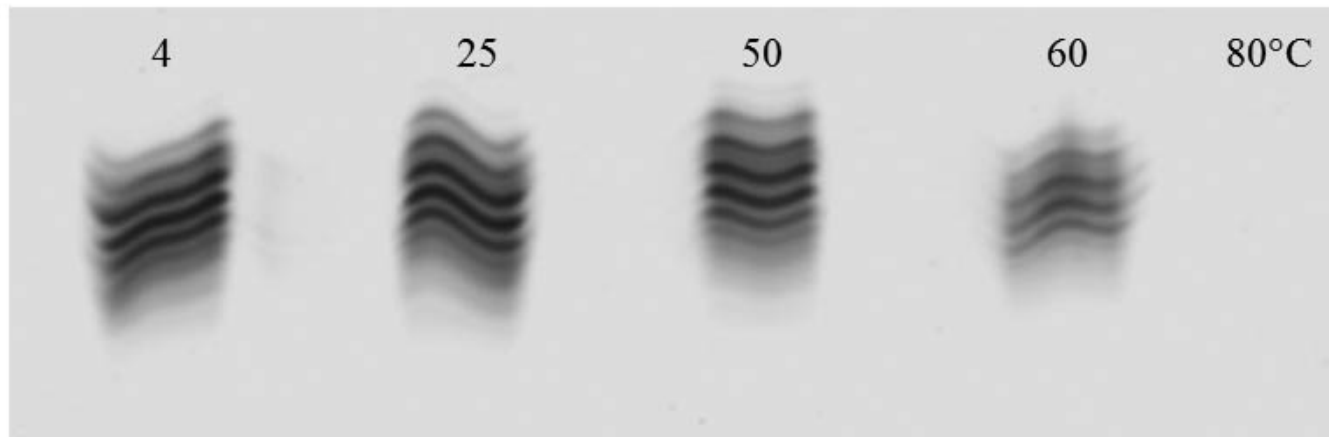


Fig S1. Thermostability of cell wall peroxidases.

Effect of temperature on iPOD (**A**) and cPOD (**B**). Samples were incubated for 15 min at different temperatures (4-80°C), before native IEF-PAGE. After protein separation peroxidase activity was visualised by 0.01% α -chloro-naphthol and 0.03% H_2O_2 in 0.1 M Na-phosphate buffer, pH 6.5.

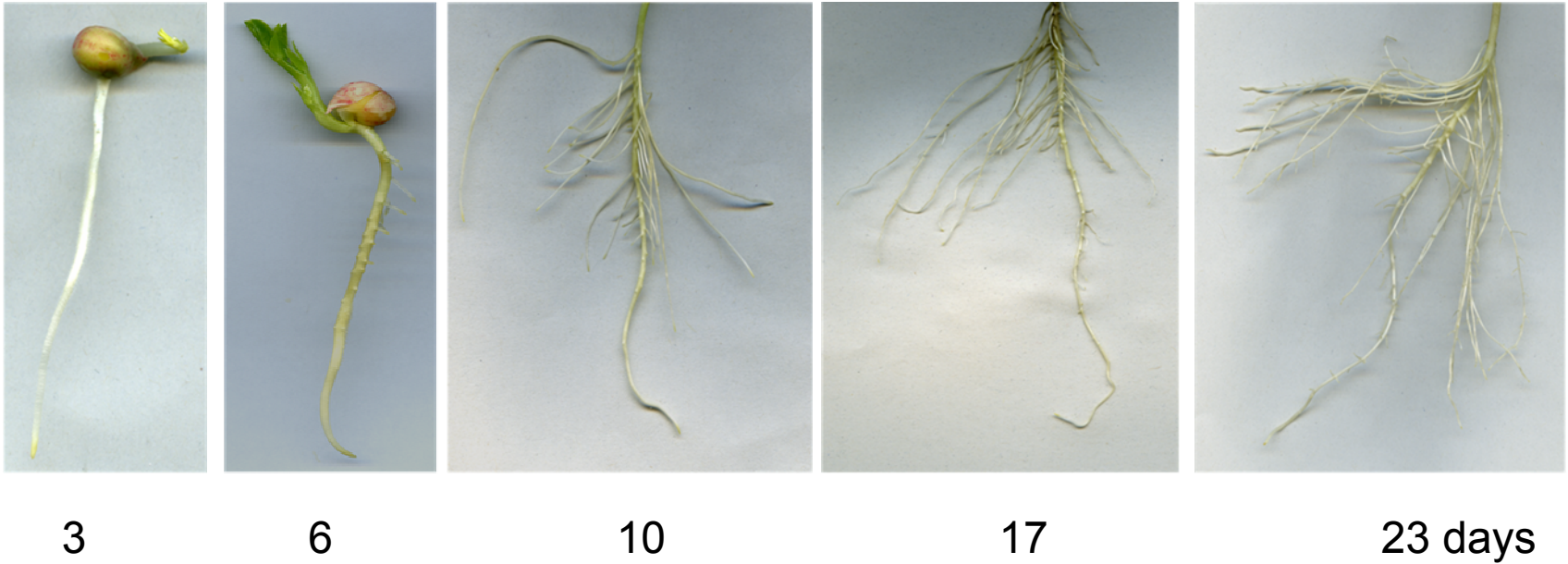


Fig S2. Appearance of pea roots in dependence on plant development.

Plants were grown in hydroponic culture for the time as indicated. Root architecture altered during plant development. After six days secondary roots appear, after ten days plants showed an increased number and length of lateral roots. Plants shown represent typical examples.

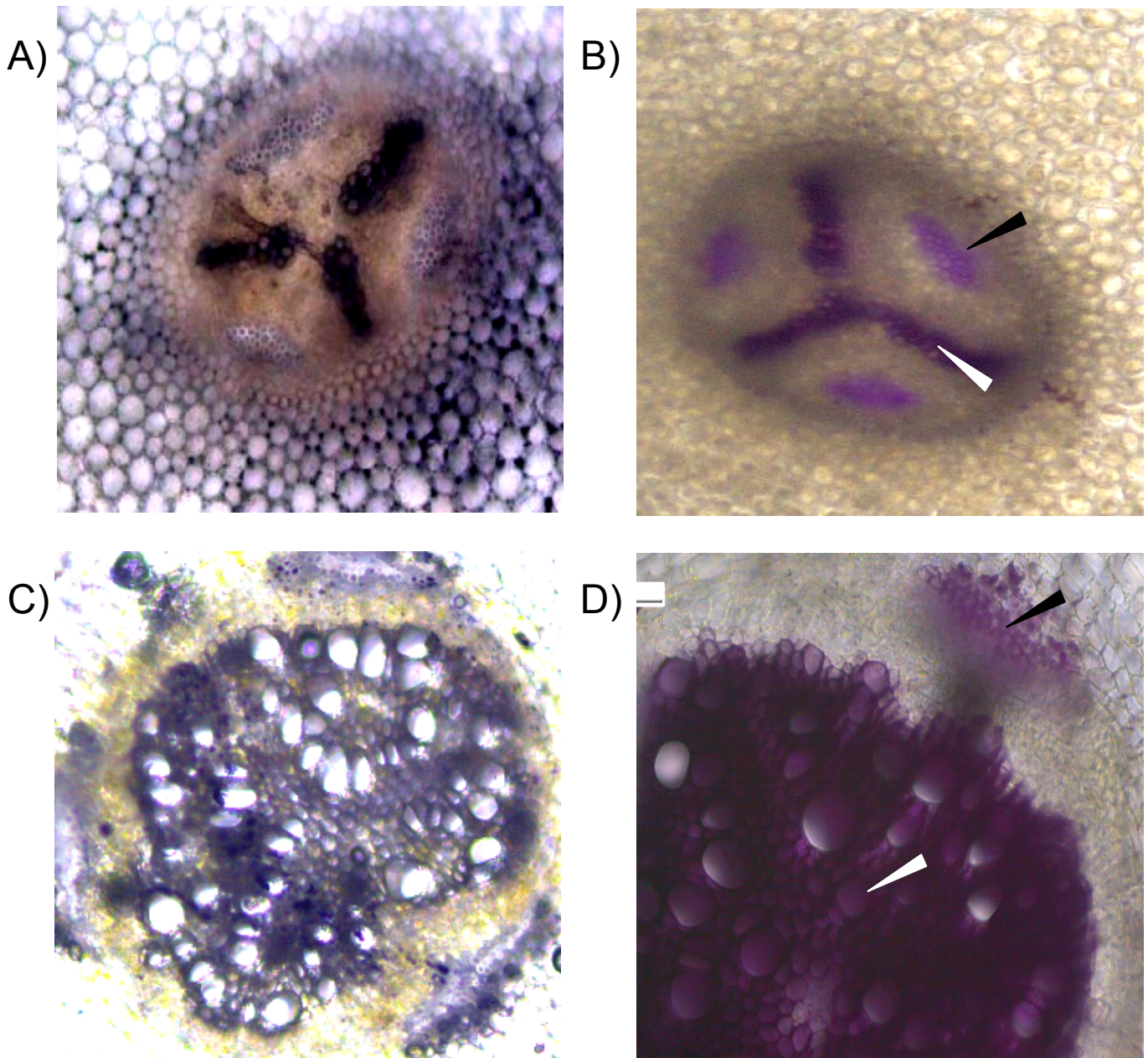


Fig. S3. Cross-sections of zone IV of three and 23 days old pea roots.

Cross-sections were stained for peroxidase activity (**A, C**) or lignin (**B, D**). Peroxidase activity was visualised by incubation of the sample in 5 mg α -chloro-naphthol solved in 5 ml methanol and 45 ml sodium phosphate buffer pH 6.4 and 50 μ l of 30% H_2O_2 . Lignin was stained with fluoroglucinol according to J.M. Nakano and G. Meshitsuka (In: *The detection of lignin*. Lin SY, Dence CW, editors. *Methods in lignin chemistry*. 1992, p. 23-61, Springer, Berlin, Germany). **A, B**) Cross sections of zone IV of three days old roots. **C, D**) Cross section of zone IV of 23 days old roots. Black arrows, phloem; white arrows, xylem.