

Table S1. Protein identification of rFgGST-S1 using MASCOT. Spectra from mass spectrometry were subjected to MSMS ion searches using MASCOT (Matrix Science). Significant hits, at P = 5%, have a MASCOT score of 52 or greater. All reported accession numbers are from GenBank.

Figure S1. MSMS sequence analysis using peptide sequencer (MassLynx v. 5.0, Micromass, UK) from the fragmentation of a precursor ion m/z 534.75 (2+) representative of the Sigma class GST. Interpretation of the y and b ion series provided the peptide sequence YQESMAIAR.

Figure S2. MSMS sequence analysis using peptide sequencer (MassLynx v. 5.0, Micromass, UK) from the fragmentation of a precursor ion m/z 889.99 (2+) representative of the Sigma class GST. Interpretation of the y and b ion series provided the peptide sequence TDEEYYLIER.

Figure S3. Representative 2DE protein arrays of *F. gigantea* GSTs purified from somatic extracts highlighting the non-specific binding of proteins using S-hexyl-GSH agarose. 15 µg of S-hexyl-GSH agarose binding proteins were profiled on a 12.5 % polyacrylamide gel via two-dimensional electrophoresis (2DE) and stained with coomassie blue. Proteins were isoelectric focused on 17 cm pH 3-10 non-linear immobilised pH gradient (IPG) strips. Boxed is the region of the gel shown in Figure 2.

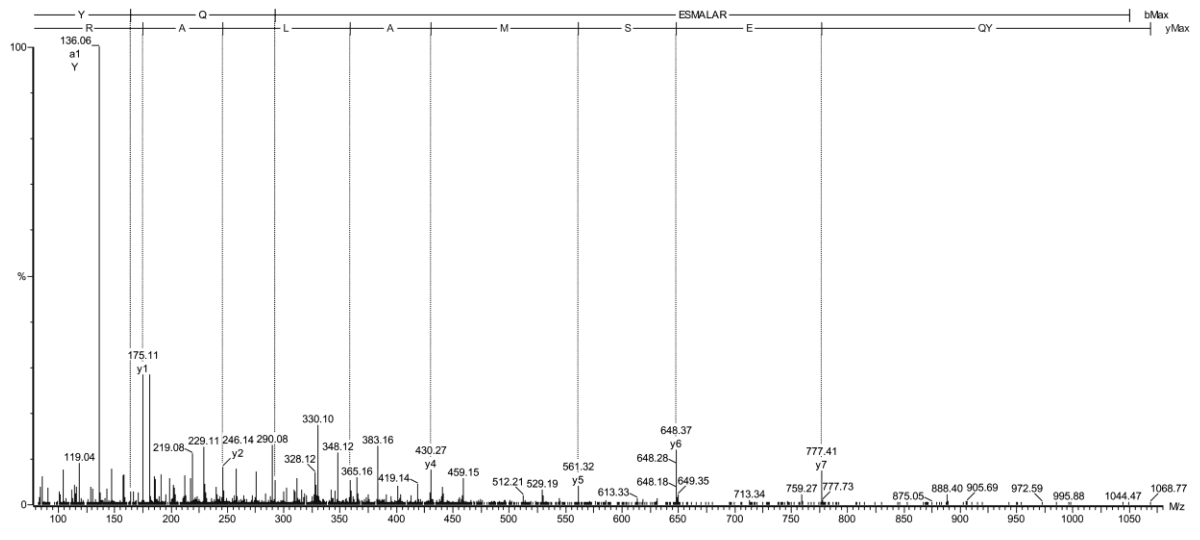


Figure S1

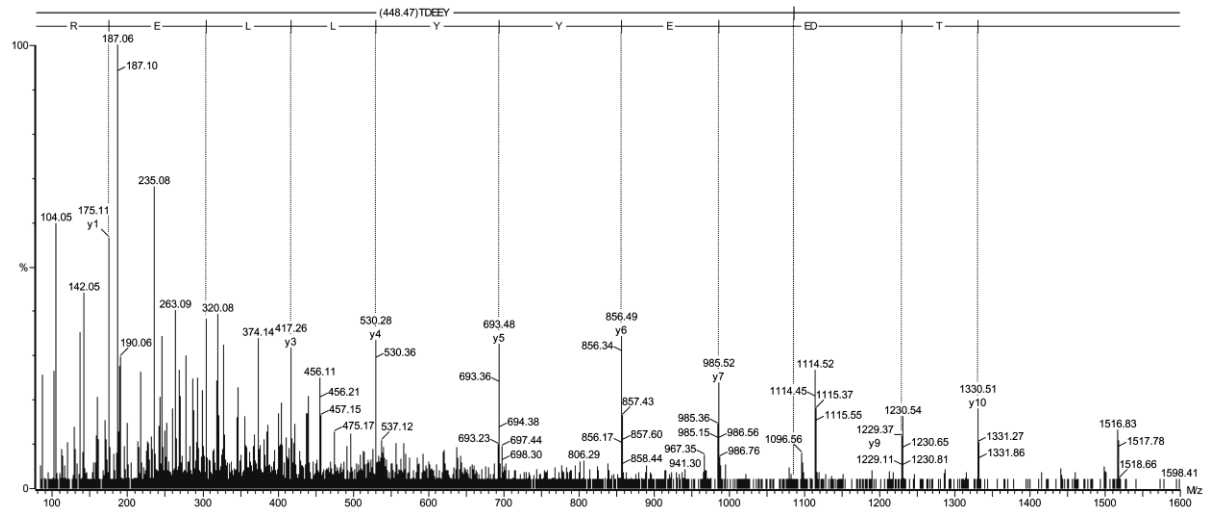


Figure S2

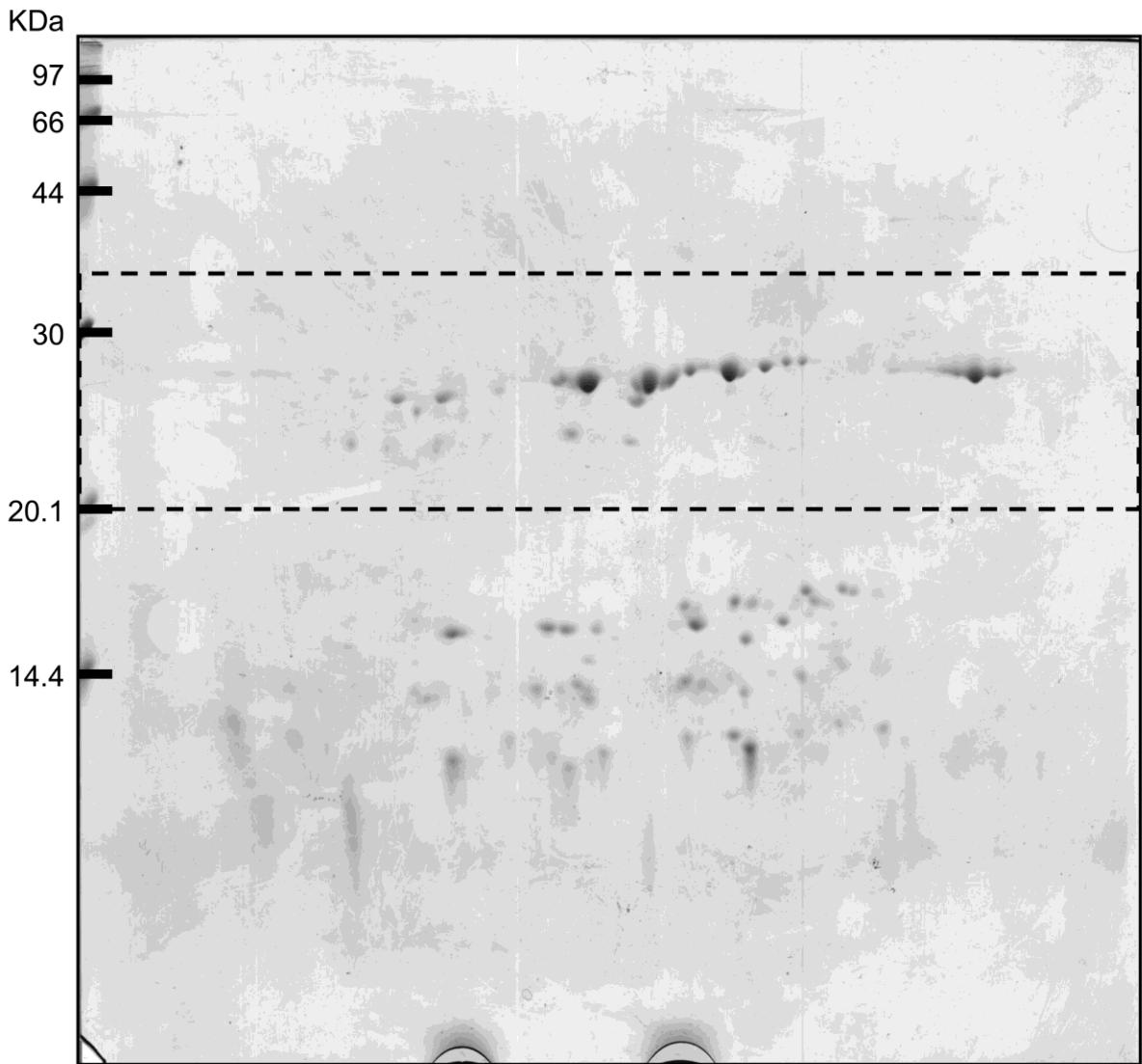


Figure S3

Table S1

Spot Number	NCBI Accession Number	MASCOT Score	Protein	Organism	% Coverage	Unique Peptides	Peptides Hit
1	2WB9_A	120	Sigma Class GST	Fasciola hepatica	17	3	VPLLDVTGPDGK MMGETDEEYLIER IIGECEDLYR
2	2WB9_A	179	Sigma Class GST	Fasciola hepatica	18	3	VPLLDVTGPDGK MMGETDEEYLIER LVSESLESSGGK
3	2WB9_A	241	Sigma Class GST	Fasciola hepatica	21	4	VPLLDVTGPDGK YQESMAIAR MMGETDEEYLIER IIGECEDLYR
4	2WB9_A	158	Sigma Class GST	Fasciola hepatica	17	3	LVSESLESSGGK IIGECEDLYR MMGETDEEYLIER
5	2WB9_A	167	Sigma Class GST	Fasciola hepatica	17	3	MMGETDEEYLIER IIGECEDLYR LVSESLESSGGK
6	2WB9_A	339	Sigma Class GST	Fasciola hepatica	34	7	LWYFQFR VPLLDVTGPDGK YQESMAIAR MMGETDEEYLIER IIGECEDLYR ENNGPTLLK LVSESLESSGGK
7	2WB9_A	313	Sigma Class GST	Fasciola hepatica	27	5	YQESMAIAR LVSESLESSGGK VPLLDVTGPDGK IIGECEDLYR MMGETDEEYLIER