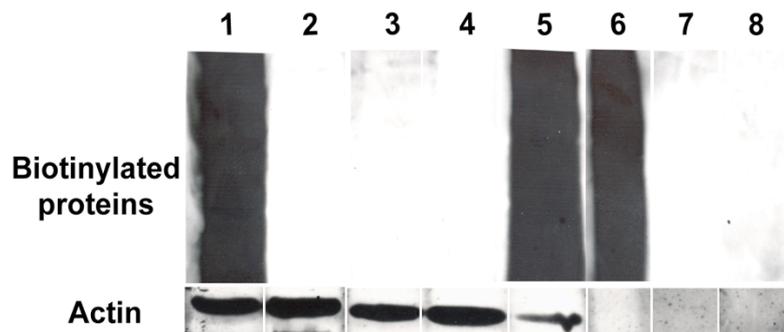
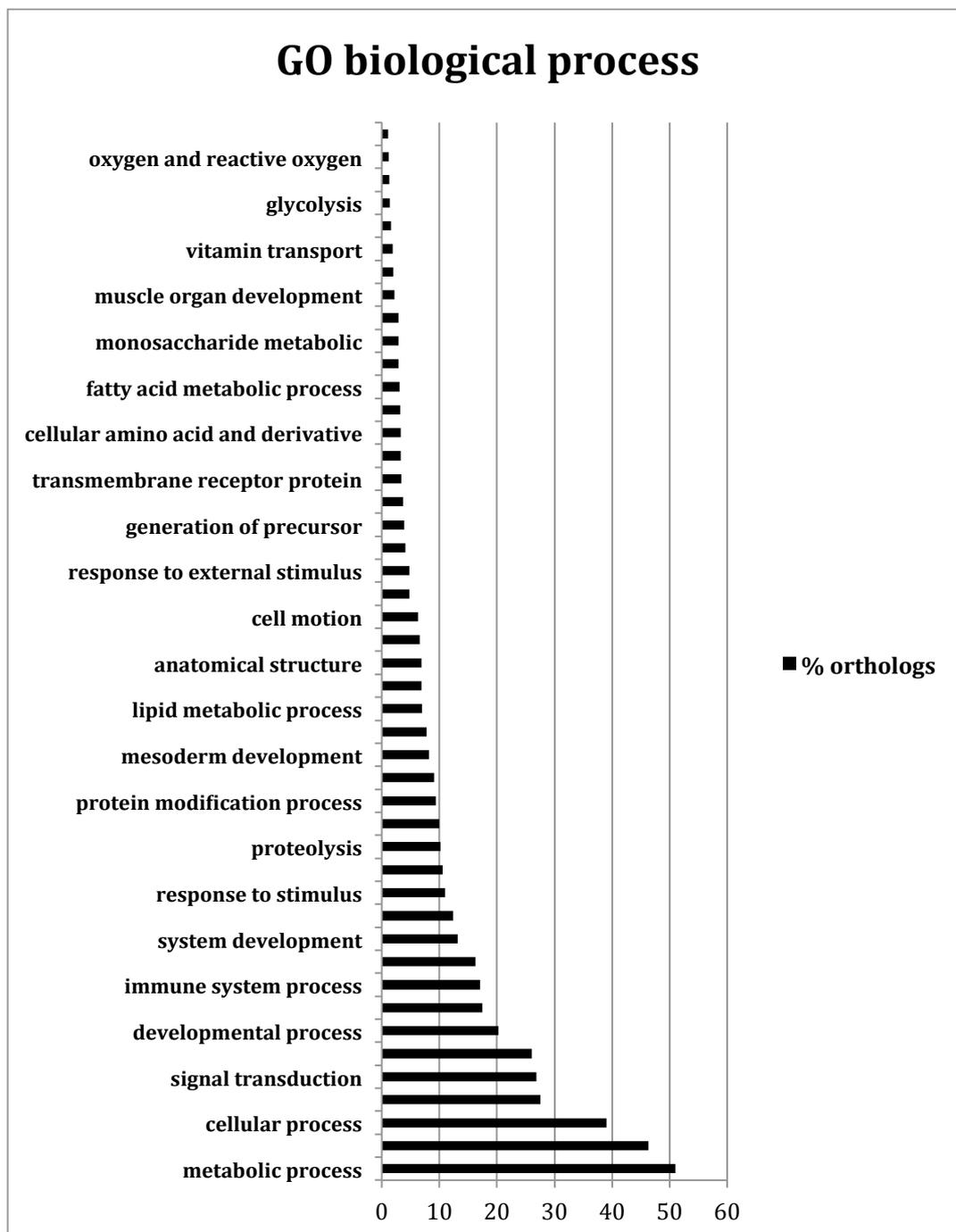


**Fig. S1. Western blot of biotinylated proteins**

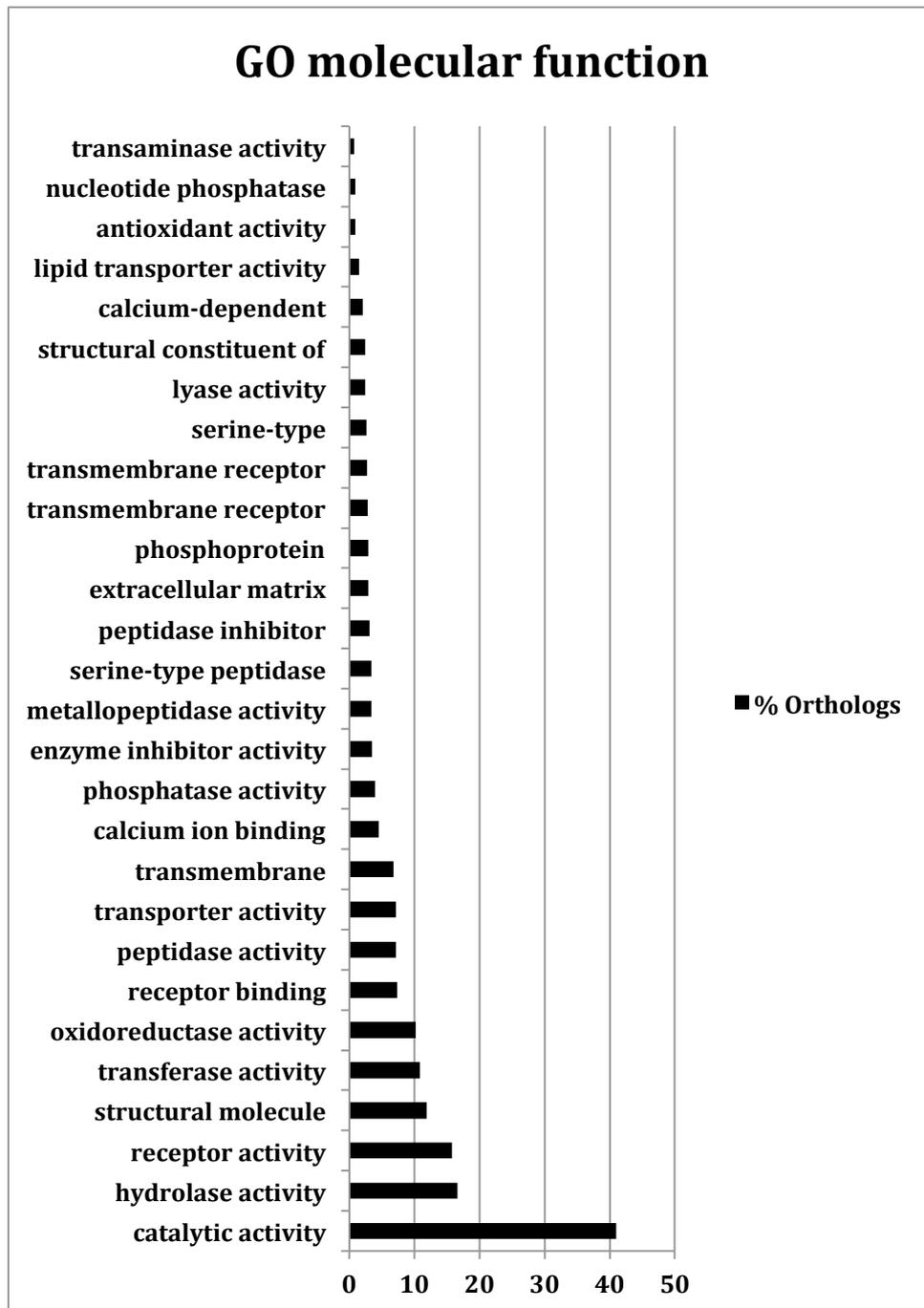
After i.v biotinylation, proteins were extracted from 1 mg of wet CAM tissue, bound to a streptavidin column and eluted from the column. Proteins were separated on a 10% SDS-polyacrylamide gel and western blotting was performed either on total protein extracts or on protein eluted from the streptavidin column as indicated in Materials and Methods. After transfer, membranes were probed with streptavidin-peroxidase and bands were visualized. Lane 1, total biotinylated proteins; lane 2, total proteins without biotinylation; lane 3, total proteins after depletion of biotinylated proteins on streptavidin resin; lane 4, total non biotinylated proteins after depletion of biotinylated proteins on streptavidin resin; lane 5, total proteins after depletion of biotinylated proteins on streptavidin resin pre-blocked with biotin (100 $\mu$ M); lane 6, proteins eluted from streptavidin resin after incubation with lysate of i.v biotinylated tissues; lane 7, proteins eluted from streptavidin resin after incubation with lysate of non-biotinylated tissue; lane 8, proteins eluted from biotin pre-blocked streptavidin resin after incubation with lysate of i.v biotinylated tissue.



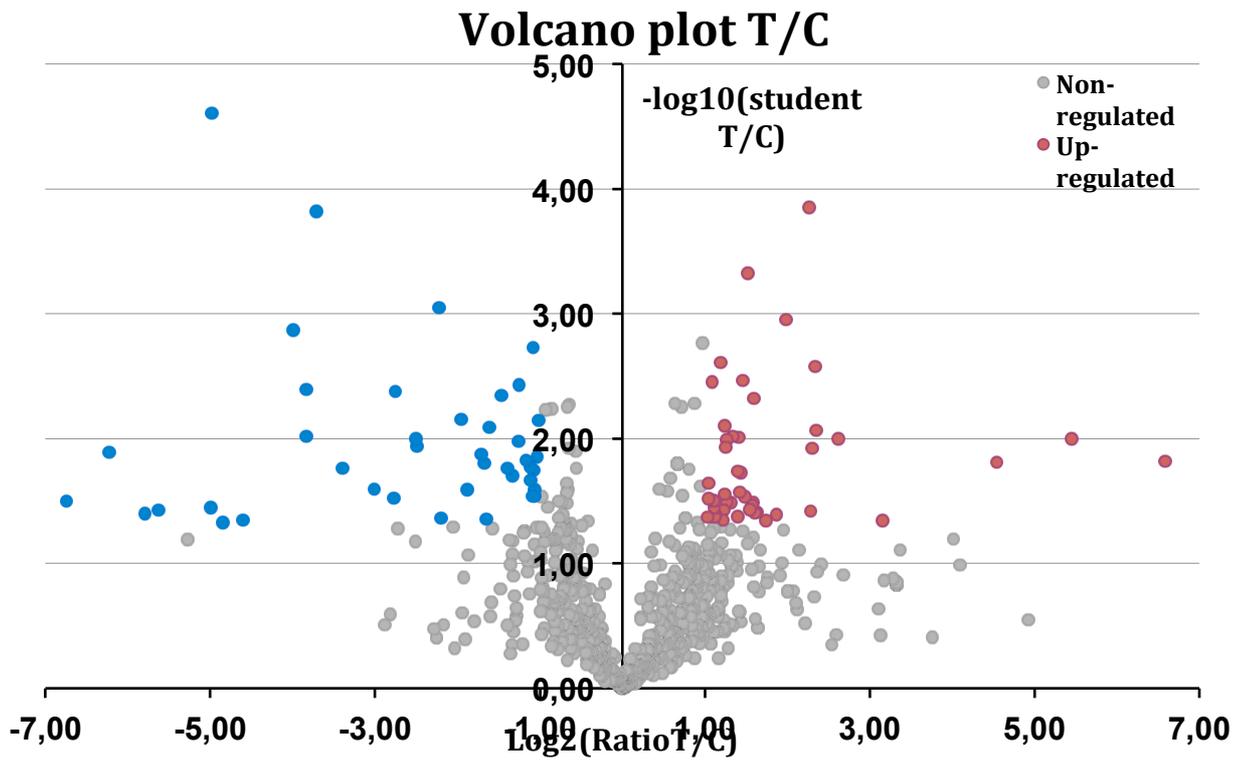
**Fig. S2A.** Gene Ontology Biological Process



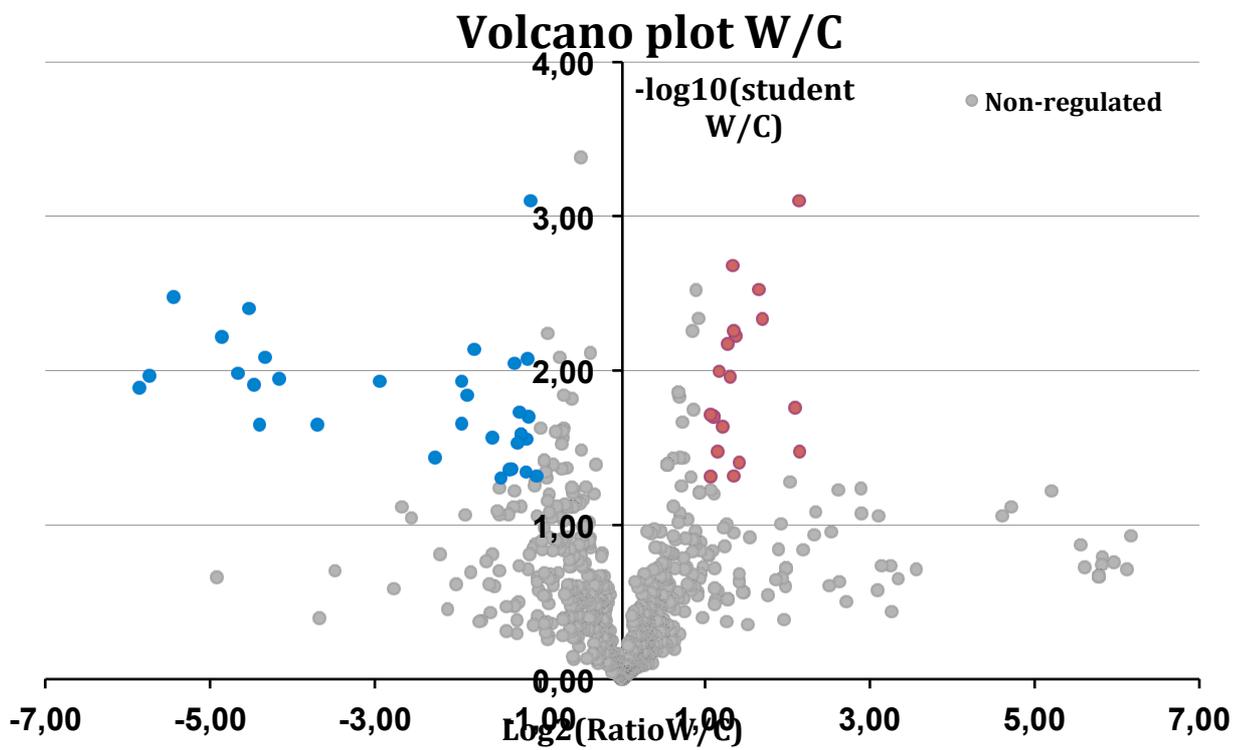
**Fig S2B.** Gene Ontology Molecular Function



**Fig. S3A.**



**Fig. S3 B.**



**Fig. S4: Expression of proteins in human glioma**

Oligo-astrocytoma samples were analysed by immunohistochemistry for the expression of extracellular and vascular biotinylated proteins identified in our proteome. Immunostaining of five proteins was performed and co-immunolocalized with the CD31 protein, an endothelial marker. For each staining, CD31 is shown in the second column (b, e, h, k and n). A mouse anti-CD31 for co-staining with anti-FSTL1, anti-SIRPA, anti-HRNR and anti-SRPX was used. A sheep anti-CD31 was used for co-staining with the mouse anti-COL IV. The co-staining is depicted in the last column (c, f, i, l and o). In a and c, tumors are stained with an anti-FSTL1, in d and f with an anti-SIRPA, in g and i with an anti-HRNR, in j and l with an anti-SRPX and finally in m and o with an anti-COL IV. Nuclei are stained with DAPI (c, f, i, l, o). Magnification is x60 and scale bar is 25 $\mu$ m.

