

# Supplementary Materials: Distinct Pattern of Endoplasmic Reticulum Protein Processing and Extracellular Matrix Proteins in Functioning and Silent Corticotroph Pituitary Adenomas

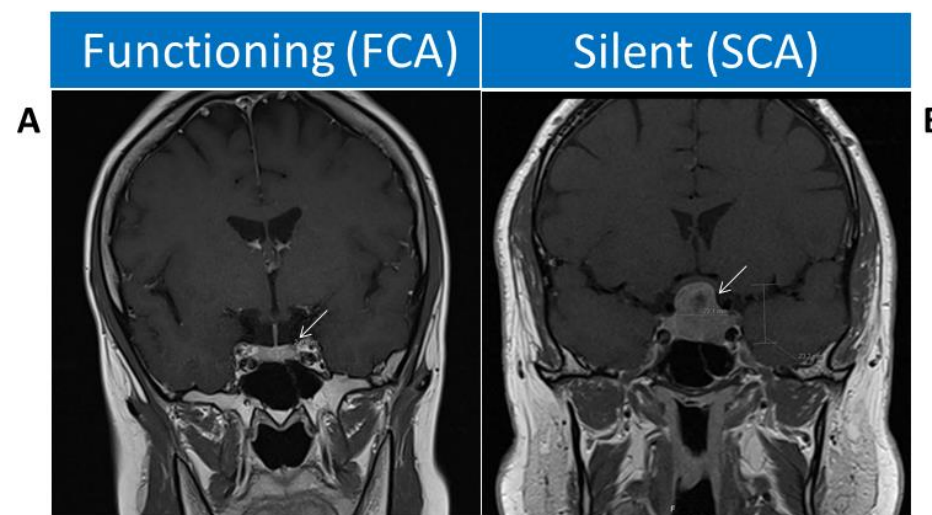
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**Table S2.** Clinical characteristics of patients with functioning (FCA) and silent (SCA) corticotroph pituitary adenomas.

Type_ID	Age (Y)	Gender F/M	Tumor diameter (mm)	Macro/ Micro	Ki67 (%)	ACTH (pmol/L)	Cortisol (nmol/L)	RNA-seq	Proteomics
FCA_1	50	M	4	micro				yes	yes
FCA_2	56	F	2	micro	1	4.4	715	yes	yes
FCA_3	53	M	4	micro	3	14.1	586	yes	yes
FCA_4	37	F	6	micro	3	4.4	654	yes	yes
FCA_5	55	M	30	macro		36.2	811	yes	no
FCA_6	51	F	8	micro		19.6	1122	yes	no
FCA_7	19	M	10	macro	3	14	438	no	yes
FCA_8	45	F	20	macro	4	12.5	253	no	yes
FCA_9	30	M	23	macro				no	yes
FCA_10	52	F	18	macro	3	54	1059	no	yes
FCA_11	45	F	8	micro	3	15	659	no	yes
FCA_12	35	F	10	micro	3	13.3	971	no	yes
FCA_13	50	F	5	micro		3.7	512	no	yes
FCA_14	59	M	6	micro		10.2	940	no	yes
SCA_1	37	M	25	macro	3		574	yes	yes
SCA_2	68	F	26	macro	5	5.6	514	yes	yes
SCA_3	74	F	62	macro	3		267	yes	yes
SCA_4	51	M	36	macro	3		173	yes	yes
SCA_5	55	M	N/A	N/A				yes	yes
SCA_6	52	M	N/A	N/A				yes	yes
SCA_7	67	M	24	macro	3	11.7	461	no	yes
SCA_8	49	M	24	macro	3	14.7	477	no	yes

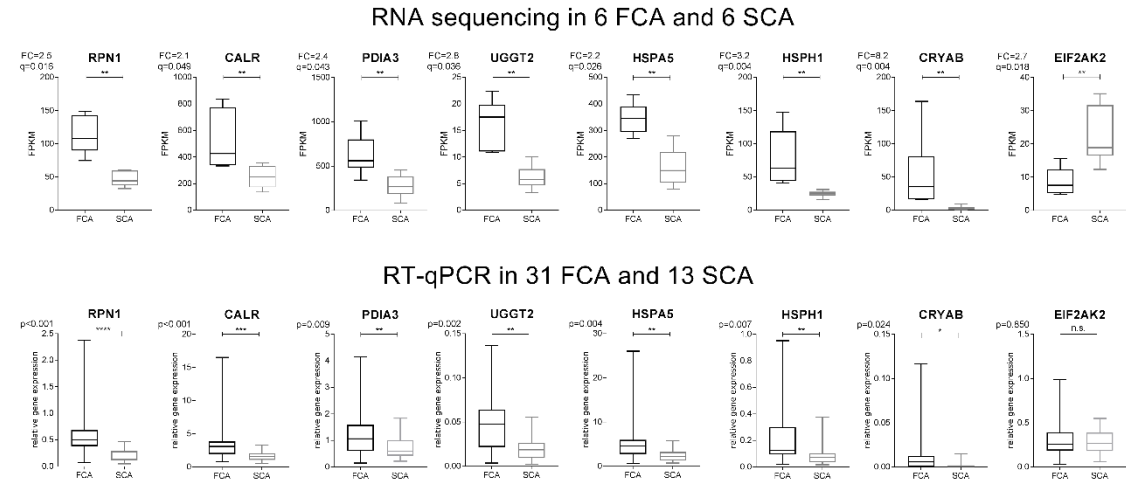
SCA_9	70	F	19	macro	5	222	no	yes
SCA_10	32	F	16	macro			no	yes
SCA_11	55	M	N/A	N/A			no	yes
SCA_12	53	M	N/A	N/A			no	yes

Age at operation in years (Y), Gender Female/Male (F/M), Tumor size showing largest measured diameter in millimeter (mm), Tumor size: Macroadenoma (Macro)  $\geq 10$  mm, Microadenoma (Micro)  $< 10$  mm, Ki67 proliferation index (%); pre-operatively plasma ACTH (pmol/L), normal range  $< 10.2$  pmol/L; pre-operatively plasma Cortisol, normal range 112-502 nmol/L. Tumors analyzed in the RNA seq. and/or proteomics = yes. Protein amount was insufficient in two patients with functioning corticotroph adenomas (FCA\_5 and FCA\_6), so these were not included in proteomics study.



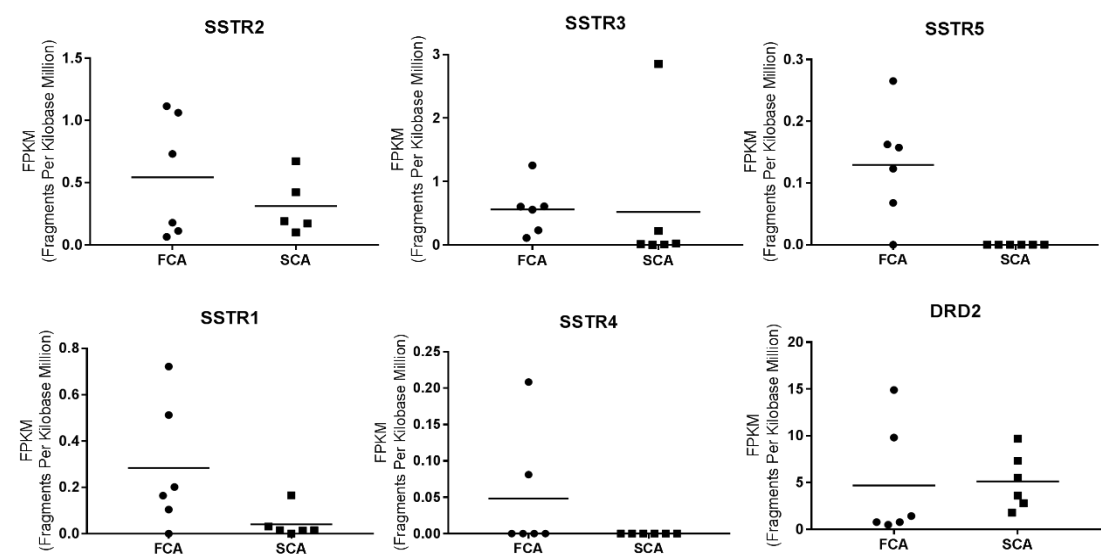
**Figure 1** Coronal MRI pictures of a functioning FCA (A) – a 2.9 mm tumor located in the upper and to the left part of the sella region, and a silent SCA (B) pituitary corticotroph adenoma – a 22 x 23 mm tumor that occupies the entire sella region and seems to invade the left parasellar region

**Figure S1.** Coronal MRI pictures of a functioning FCA (A) and a silent SCA (B) pituitary corticotroph adenoma,.



Data is presented as box and whiskers and min to max. FC, fold of change; q, adjusted p value; RT-qPCR data is analysed using GraphPad program by Mann-Whitney test and  $p < 0.05$  is statistical significant; Functioning (FCA) and silent corticotroph (SCA) pituitary adenomas.

**Figure S2.** protein processing activity of endoplasmic reticulum in functioning pituitary corticotroph adenoma (FCA).



**Figure S3.** Gene expression of somatostatin receptors (SSRs) 1-5 and dopamine receptor type 2 (DRD2) in functioning (FCA) and silent (SCA) corticotroph pituitary adenomas.