

Supplementary Information 2 | **Deregulation of Fos family members in cancer.**

Observation	Tumor Type	References
<i>FOS expression associates with high grade lesions/ Relapse/ Poor Outcome</i>	Osteosarcoma	1,2
<i>Downregulation of FOSB Upregulation and phosphorylation of FRA1/FRA2</i>	Breast Cancer	3
<i>FOS overexpression correlates with tumor progression and de-differentiation</i>	Endometrial Cancer	4
<i>Increased FOS expression FRA1 silencing (act as a tumor suppressor)</i>	Cervical Cancer	5
<i>FOS amplification and overexpression</i>	Ovarian Cancer	6
<i>FOS is a strong predictor of short survival</i>	Lung (NSCLC)	7
<i>FRA1 upregulation</i>	Colorectal	8
<i>FRA1 upregulation and nuclear localization</i>	Skin tumors	9
<i>FRA1 overexpression</i>	Thyroid carcinoma	10
FOS/ FRA1 overexpression	Esophageal cancer	11
FOS overexpression	Hepatocellular	12

References

- Papachristou, D.J., Batistatou, A., Sykiotis, G.P., Varakis, I. & Papavassiliou, A.G. Activation of the JNK-AP-1 signal transduction pathway is associated with pathogenesis and progression of human osteosarcomas. *Bone* **32**, 364-71 (2003).
- Gamberi, G. et al. C-myc and c-fos in human osteosarcoma: prognostic value of mRNA and protein expression. *Oncology* **55**, 556-63 (1998).
- Bamberger, A.M. et al. Expression pattern of the AP-1 family in breast cancer: association of fosB expression with a well-differentiated, receptor-positive tumor phenotype. *Int J Cancer* **84**, 533-8 (1999).
- Bamberger, A.M., Milde-Langosch, K., Rossing, E., Goemann, C. & Loning, T. Expression pattern of the AP-1 family in endometrial cancer: correlations with cell cycle regulators. *J Cancer Res Clin Oncol* **127**, 545-50 (2001).
- Prusty, B.K. & Das, B.C. Constitutive activation of transcription factor AP-1 in cervical cancer and suppression of human papillomavirus (HPV) transcription and AP-1 activity in HeLa cells by curcumin. *Int J Cancer* **113**, 951-60 (2005).
- Tsuda, H. et al. Identification of DNA copy number changes in microdissected serous ovarian cancer tissue using a cDNA microarray platform. *Cancer Genet Cytogenet* **155**, 97-107 (2004).
- Volm, M., Koomagi, R., Mattern, J. & Efferth, T. Expression profile of genes in non-small cell lung carcinomas from long-term surviving patients. *Clin Cancer Res* **8**, 1843-8 (2002).
- Wang, H.L. et al. Elevated protein expression of cyclin D1 and Fra-1 but decreased expression of c-Myc in human colorectal adenocarcinomas overexpressing beta-catenin. *Int J Cancer* **101**, 301-10 (2002).

9. Serewko, M.M. et al. Alterations in gene expression and activity during squamous cell carcinoma development. *Cancer Res* **62**, 3759-65 (2002).
10. Liu, G. et al. Screening of specific changes in mRNAs in thyroid tumors by sequence specific differential display: decreased expression of c-fos mRNA in papillary carcinoma. *Endocr J* **46**, 459-66 (1999).
11. Hu, Y.C., Lam, K.Y., Law, S., Wong, J. & Srivastava, G. Identification of differentially expressed genes in esophageal squamous cell carcinoma (ESCC) by cDNA expression array: overexpression of Fra-1, Neogenin, Id-1, and CDC25B genes in ESCC. *Clin Cancer Res* **7**, 2213-21 (2001).
12. Yuen, M.F., Wu, P.C., Lai, V.C., Lau, J.Y. & Lai, C.L. Expression of c-Myc, c-Fos, and c-jun in hepatocellular carcinoma. *Cancer* **91**, 106-12 (2001).