

a)

<b>Consensus</b>	PxIxIT
VIVIT	PVIVIT
NFAT1	PRIEIT
TRESK	PQIIIS
Crz1	PIISIQ
Slm1	PNIYIQ
Slm2	PEFYIE
Hph1	PVIAVN
RCAN1	PSVVVH
Rcn1	GAITID
Rcn2	PSITVN
Rcn1 (Dm)	PAIIVH
<b>folA (mut)</b>	PAVL <b>NS</b>

b)

NFAT1	ESILLVPP-----TW--PKPLVP
NFAT2	DQYLAVPQ--HPYQWAKPKPLSP
NFAT3	MDYLAVPS---PLAWSKARIGGH
NFAT4	DQFLSVPS---PFTWSKPKPGHT
DSCR1	KQFLISPPASPPVGWKQVEDATP
<b>folA</b>	LRNIQLPLPAAPDPWHRNGKPQP

**Figure S4** a) Calcineurin docking sequences in various interacting proteins (adapted from Interaction of calcineurin with substrates and targeting proteins. Huiming Li, Anjana Rao and Patrick G. Hogan, Trends Cell Biol., 2011, 21: 91-103). The mutated residue encoded by *folA1* (D18N) is highlighted in red. b) Sequence alignment of the calcineurin-binding region B in human NFAT1 to -4 and the calcineurin inhibitor DSCR1 (taken from Transcriptional regulation by calcium, calcineurin, and NFAT. Patrick G. Hogan, Lin Chen, Julie Nardone, et al. *Genes Dev.* 2003, 17: 2205-2232). These sequences were realigned including the sequence of *FoIA* using T-coffee with standard options at (<http://www.tcoffee.org/> XXREF T-Coffee: a web server for the multiple sequence alignment of protein and RNA sequences using structural information and homology extension. Paolo Di Tommaso, Sebastien Moretti, Ioannis Xenarios, Miquel Orobitg, Alberto Montanyola, Jia-Ming Chang, Jean-François Taly and Cedric Notredame, Nucl. Acids Res. 2011, 39 (suppl 2): W13-W17).