Α		F47	
ERM	38-	DLAH-DSEELFQDLSQLQEAWLAEAQVPDDEQFVPD	-72
VP16	432-	AMAHADALDDF-DLDMLGDGDSPGPGFTPHDSAPYG	-466
		H1 ◄→ H2 F442	



Supplementary Figure 1



Titration of MED25 ACID domain with ERM 38-68

Supplementary Figure 2



ERM	38-	DLAHDSEELFQDLSQLQEAWLAEAQVPD-DEQFVPDFQSDNLV	-79
ETV1	38-	DLAHDSEELFQDLSQLQETWLAEAQVPDNDEQFVPDYQAESLA	-80
PEA3	43-	GSLPPLDSEDLFQDLSHFQETWLAEAQVPDSDEQFVPDFHSENLA	-87
ER81	38-	DLAHDSEELFQDLSQLQETWLAELA	-62

Supplementary Figure 3





Supplementary Figure 4

ERM

MMP-1

PEA3

ETV1

A

Supplementary Figure 1. Determination of the minimal domain required for transactivation by ERM. **(A)** Sequence alignment of the ERM TAD from human ERM with the he rpes simplex VP 16 TAD. Identical residues are highlighted in gray and conserved residues are boxed in light gray. **(B)** U2OS cells were cotransfected with the reporter plasmid (Gal4)5-E1b-Luc along with Gal4-DBD alone and the Gal4-ERM constructs (1-72, 1-38, 38-72 and 1-72 F47L). Activation for G al4-ERM derivatives is represented as fold in crease over a ctivity obt ained with Gal-DBD alone. E rrors bars re present standard error of the mean of three i ndependent experiments, each performed in duplicate. (Inset) The level of expre ssion of the Gal4 de rivatives was monitored by Wester n-blot using an antibody against the Gal4 DNA-binding domain (α Gal4).

Supplementary Figure 2. Isothermal calorimetry titration of MED25 ACID/PTOV domain with ERM 38-68. The curve was fitt ed u sing a single-binding site to give t he dissociation constant (K_d). The experimental conditions are as described in the material and methods.

Supplementary Figure 3. The PEA3 group members interact with ME D25. RK13 cells were cotransfected with the indicated plasmids and co-immunoprecipitation was performed as in Figure 1D. The anti-ERM antibody used cross-reacts with the three PEA3 member s. Ali gnment of amino acid sequences of human ERM, human ETV1, human PEA3 and hum an ER81 aci dic domain is shown. Identical residues are highlighted in gray.

Supplementary Figure 4. MED25 mediates ETVs-dependent target gene expression. **(A)** Silencing MED25 do wnregulates t he in duction of *MMP-1* mRNA by ETV1 and ERM in MCF-7 cells. Experiments were performed as in Figure 5. RNA from cells transfected with control (Ctrl), control and MED25-specific siRNA (Ctrl + si MED25), ETV1 (ETV1), ETV1 and MED25-specific siRNA (ETV1 + si MED25), ERM (ERM) and ERM and MED25-specific siRNA (ERM + si MED25) was subjected to RT-qPCR. Va lues ar e p lotted r elative to control set to 1. Error bars show standard deviation of two independent transfections performed in triplicate. (Inset) The knockdown of endogenous MED25 and the expression of Flag-ETV1 and Flag-ERM were confirmed by Western-blot using antibodies against MED25 and Flag, respectively. **(B)** Effect of selective depletion of individual PEA3, ERM and ETV1 by siRNA on *MMP-1* expression in MDA-MB 231 cells. Data points are the average of two independent experiments. Error bars show standard deviation.