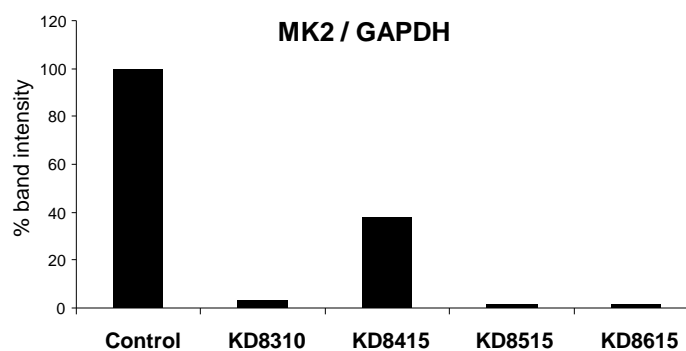
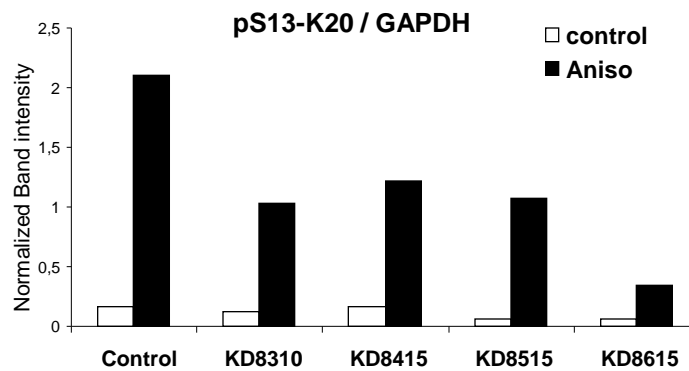
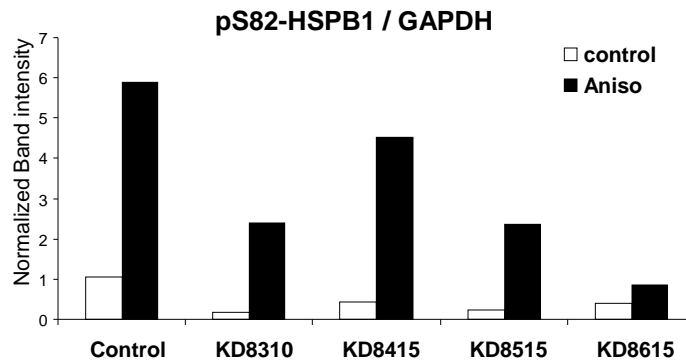
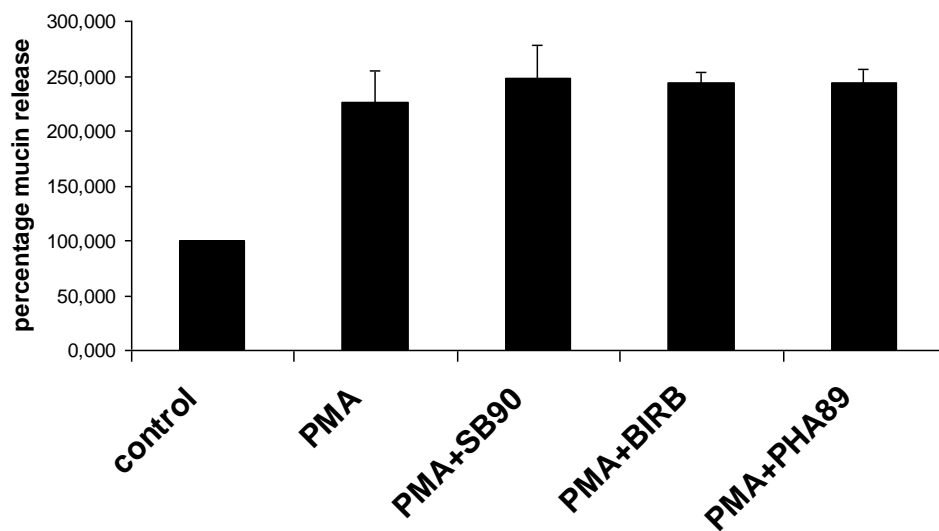


**Supplementary Figure 1.** Pro-Q Diamond stained spots from gel portions shown in figure 1 were quantified by TINA software (RayTest). The data is presented as fold change – MK2 by empty vector. Identified spots (mHSPB1, BAG2 and Keratin 8) are in blue and random selected spots are marked in red.



**Supplementary Figure 2.** Cell lines stably transduced with different MK2 shRNA constructs (KD8310, KD8415, KD8515, KD8615) and with a control shRNA were analysed for MK2 levels and anisomycin stimulated K20 S13 and Hsp27 S82 phosphorylation. Band intensities were calculated and normalised to GAPDH as described in 'materials and methods'.



**Supplementary Figure 3.** Differentiated HT29-MTX cells were treated as in figure 4C and stimulated with 100ng/mL PMA (Sigma) for 30 minutes. The cells were pre-treated for 30 minutes with 5 $\mu$ M SB202190 (SB90), 1 $\mu$ M BIRB-796 (BIRB) or 25 $\mu$ M PHA781089 (PHA89). Mucin was quantified by ELLA and represented as percentage control