

Supplementary Table 1

	U	C	A	G	
U	Phe	Ser	Tyr	Trp	U
				Cys	C
C	Leu	Pro	His	Arg	U
					C
A	Gly	Thr	Asn	Ser	U
	ClAcF				C
G	Val	Ala	Asp	Gly	U
					C

Supplementary Table 2

K _D ± SD (μM)	KRAS				NRAS			HRAS	
	WT		G12D		WT		Q61R	WT	
	GDP	GMPPnP	GDP	GMPPnP	GDP	GMPPnP	GTP	GDP	GMPPnP
MPB1	0.12 ± 0.04	>10	0.16±0.06	>10	3.6±3.7	>10	>10	1.1 ± 0.8	> 10
MPB2	>10	1.9 ± 0.5	>10	1.6 ± 0.5	>10	0.6 ± 0.3	0.29±0.2	>10	1.4±0.5
MPB3	>10	>10	>10	>10	0.076±0.026	0.1±0.07	0.09±0.06	>10	>10