## Supplemental Table S1. Plasmids used in this study.

<u>#</u>	Plasmid Name	Plasmid Description
pAAH0403 <sup>1</sup>	pRS414-Hsh155 <sup>WT</sup>	Plasmid used to generate Hsh155 <sup>WT</sup> strain. Hsh155 coding
p/ 1/ 1/ 10 100		region +/- 250bp was cloned into pRS414 using Sacl/Xhol sites.
pAAH0854	Hsh155 T178A	Used to generate a strain with mutated Hsh155. Made by site-
p. 2 1000 :		directed mutagenesis of pAAH0403
pAAH0855	Hsh155 R181A	Used to generate a strain with mutated Hsh155. Made by site-
'		directed mutagenesis of pAAH0403
pAAH0856	Hsh155 R182A	Used to generate a strain with mutated Hsh155. Made by site-
•		directed mutagenesis of pAAH0403  Used to generate a strain with mutated Hsh155. Made by site-
pAAH0857	Hsh155 R186A	directed mutagenesis of pAAH0403
	Hsh155 T178A R181A R182A R186A (N4A)	Used to generate a strain with mutated Hsh155. Made by site-
pAAH0858		directed mutagenesis of pAAH0403
		Used to generate a strain with mutated Hsh155. Made by site-
pAAH0860	Hsh155 K227A	directed mutagenesis of pAAH0403
	Hsh155 Q773A	Used to generate a strain with mutated Hsh155. Made by site-
pAAH0862		directed mutagenesis of pAAH0403
4.4.10.000		Used to generate a strain with mutated Hsh155. Made by site-
pAAH0863	Hsh155 R775A	directed mutagenesis of pAAH0403
	11-1-455 O770A	Used to generate a strain with mutated Hsh155. Made by site-
pAAH0864	Hsh155 Q776A	directed mutagenesis of pAAH0403
~ A A L IOOGE	Lloh455 D770A	Used to generate a strain with mutated Hsh155. Made by site-
pAAH0865	Hsh155 R778A	directed mutagenesis of pAAH0403
pAAH0866	Hsh155 Q773A R775A	Used to generate a strain with mutated Hsh155. Made by site-
раапоооо	R776A Q778A (C4A)	directed mutagenesis of pAAH0403
pAAH0818	Hsh155 K740A	Used to generate a strain with mutated Hsh155. Made by site-
parilogio		directed mutagenesis of pAAH0403
pAAH0819	Hsh155 R744A	Used to generate a strain with mutated Hsh155. Made by site-
p/ t/ 110010		directed mutagenesis of pAAH0403
pAAH0820	Hsh155 N747A	Used to generate a strain with mutated Hsh155. Made by site-
<b>P</b> = = = = = = = = = = = = = = = = = = =		directed mutagenesis of pAAH0403
pAAH0821	Hsh155 V783A	Used to generate a strain with mutated Hsh155. Made by site-
		directed mutagenesis of pAAH0403
pAAH0822	Hsh155 K818A	Used to generate a strain with mutated Hsh155. Made by site-
-		directed mutagenesis of pAAH0403  Used to generate a strain with mutated Hsh155. Made by site-
pAAH0823	Hsh155 Y826A	directed mutagenesis of pAAH0403
		Used to generate a strain with mutated Hsh155. Made by site-
pAAH0875	Hsh155 K740R	directed mutagenesis of pAAH0403
	Hsh155 N747D	Used to generate a strain with mutated Hsh155. Made by site-
pAAH0876		directed mutagenesis of pAAH0403
A A L 10075	Hsh155 V783L	Used to generate a strain with mutated Hsh155. Made by site-
pAAH0878		directed mutagenesis of pAAH0403
n A A I IOO70	Hsh155 K818R	Used to generate a strain with mutated Hsh155. Made by site-
pAAH0879		directed mutagenesis of pAAH0403
рААН0933	Hsh155 64-972	Used to generate a strain with truncated Hsh155 (aa 64-972).
		Made by site-directed mutagenesis of pAAH0403
рААН0934	Hsh155 96-972	Used to generate a strain with truncated Hsh155 (aa 95-972).
		Made by site-directed mutagenesis of pAAH0403
рААН0958	Hsh155 103-972	Used to generate a strain with truncated Hsh155 (aa 103-972).
		Made by site-directed mutagenesis of pAAH0403

pAAH0935	Hsh155 157-972	Used to generate a strain with truncated Hsh155 (aa 157-972).  Made by site-directed mutagenesis of pAAH0403
рААН0959	Hsh155 197-972	Used to generate a strain with truncated Hsh155 (aa 197-972).  Made by site-directed mutagenesis of pAAH0403
рААН0936	Hsh155 237-972	Used to generate a strain with truncated Hsh155 (aa 237-972).  Made by site-directed mutagenesis of pAAH0403
рААН0960	Hsh155 275-972	Used to generate a strain with truncated Hsh155 (aa 275-972).  Made by site-directed mutagenesis of pAAH0403
pAAH0961	Hsh155 310-972	Used to generate a strain with truncated Hsh155 (aa 310-972).  Made by site-directed mutagenesis of pAAH0403
pAAH0962	Hsh155 351-972	Used to generate a strain with truncated Hsh155 (aa 351-972). Made by site-directed mutagenesis of pAAH0403
рААН0963	Hsh155 472-972	Used to generate a strain with truncated Hsh155 (aa 472-972). Made by site-directed mutagenesis of pAAH0403
рААН0964	Hsh155 1-966	Used to generate a strain with truncated Hsh155 (aa 1-966). Made by site-directed mutagenesis of pAAH0403
рААН0965	Hsh155 1-961	Used to generate a strain with truncated Hsh155 (aa 1-961). Made by site-directed mutagenesis of pAAH0403
рААН0966	Hsh155 1-956	Used to generate a strain with truncated Hsh155 (aa 1-956).  Made by site-directed mutagenesis of pAAH0403
pAAH0967	Hsh155 1-951	Used to generate a strain with truncated Hsh155 (aa 1-951).  Made by site-directed mutagenesis of pAAH0403
pAAH0937	Hsh155 1-945	Used to generate a strain with truncated Hsh155 (aa 1-945). Made by site-directed mutagenesis of pAAH0403
рААН0938	Hsh155 1-910	Used to generate a strain with truncated Hsh155 (aa 1-910). Made by site-directed mutagenesis of pAAH0403
pAAH0869	Hsh155 3xFLAG	Same as pAAH0403 but with 3xFLAG at C-terminus
pAAH0945	Hsh155 Hs 1-5 3xFLAG	Human HEATs 1-5 have been inserted into pAAH0869.
pAAH0944	Hsh155 Hs 1-12 3xFLAG	Human HEATs 1-12 have been inserted into pAAH0869.
pAAH0946	Hsh155 Hs 1-16 3xFLAG	Human HEATs 1-16 have been inserted into pAAH0869.
pAAH0940	Hsh155 Hs 5-12 3xFLAG	Human HEATs 5-12 have been inserted into pAAH0869.
pAAH0943	Hsh155 Hs 5-16 3xFLAG	Human HEATs 5-16 have been inserted into pAAH0869.
pAAH0939	Hsh155 Hs 5-20 3xFLAG	Human HEATs 5-20 have been inserted into pAAH0869.
pAAH0941	Hsh155 Hs 12-20 3xFLAG	Human HEATs 12-20 have been inserted into pAAH0869.
-	pACT1CUP1 WT	WT reporter used for ACT1-CUP1 assays. Gift of D. Brow <sup>2</sup>
-	pACT1CUP1 U254G	BS U254G reporter used for ACT1-CUP1 assays. Gift of C. Query
-	pACT1CUP1 A255G	BS A255G reporter used for ACT1-CUP1 assays. Gift of C. Query
-	pACT1CUP1 C256A	BS C256A reporter used for ACT1-CUP1 assays. Gift of C. Query
-	pACT1CUP1 U257A	BS U257A reporter used for ACT1-CUP1 assays. Gift of C. Query
-	pACT1CUP1 U257C	BS U257C reporter used for ACT1-CUP1 assays. Gift of C. Query
-	pACT1CUP1 U257G	BS U257G reporter used for ACT1-CUP1 assays. Gift of C. Query
-	pACT1CUP1 A258C	BS A258C reporter used for ACT1-CUP1 assays. Gift of C. Query
-	pACT1CUP1 A258G	BS A258G reporter used for ACT1-CUP1 assays. Gift of C. Query
-	pACT1CUP1 A258U	BS A258U reporter used for ACT1-CUP1 assays. Gift of C. Query

-	pACT1CUP1 BS C (A259C)	BS A259C reporter used for ACT1-CUP1 assays. Gift of C. Query
-	pACT1CUP1 BS G (A259G)	BS A259C reporter used for ACT1-CUP1 assays. Gift of C. Query
-	pACT1CUP1 C260G	BS C260G reporter used for ACT1-CUP1 assays. Gift of C. Query
pAAH1047	Hsh155 N4A 3xFLAG	Derived from pAAH0869. Contains T178A, R181A, R182A, R186A. Used for western blotting to confirm expression.
pAAH1048	Hsh155 R775A 3xFLAG	Derived from pAAH0869. Contains R775A. Used for WB to confirm mutant expression.
pAAH1049	Hsh155 R778A 3xFLAG	Derived from pAAH0869. Contains R778A. Used for WB to confirm mutant expression.
pAAH1050	Hsh155 K818A 3xFLAG	Derived from pAAH0869. Contains K818A. Used for WB to confirm mutant expression.

<sup>&</sup>lt;sup>1</sup>Originally described in Carrocci et al. 2017. <sup>2</sup>Originally described in Lesser and Guthrie 1993.