

**Figure S3**

UmSDH2 sen	MSLFNVSNGL	RTALRPSVAS	S - - - - SRVAA	FSTTAAARLA	TPTSD - NVGS	SGKPQHLKQF	KIYRW	60
UmSDH2 res	.....	.....	.....	.....	.....	.....	.....	60
THTG_04978	.....-AG.T.	.A.VQ.V.SG	.RSSIA.T..	.....L.Q..	.....S.....	.....K..A.	.....	64
UmSDH2 sen	NPDKPSEKPR	LQSYTLDLNQ	TGPMVLDALI	KIKNEIDPTL	TFRRSCREGI	CGSCAMNIDG	VNTLA	125
UmSDH2 res	.....	.....	.....	.....	.....	.....	.....	125
THTG_04978	.....A.....	..T.....	.....V..S.	.....	.....	.....	.....	129
UmSDH2 sen	CLCRIDKQND	TKIYPLPHMY	IVKDLVPDLT	QFYKQYRSIE	PFLKSNNTPS	EGEHLQSPEE	RRRLD	190
UmSDH2 res	.....	.....	.....	.....	.....	.....	.....	190
THTG_04978	.....REKE	S.....	V.....	.....	.....K.P.A	Q.....	.....	194
UmSDH2 sen	GLYECILCAC	CSTSCPSYWW	NQDEYLGPAV	LMQAYRWMAD	SRDDFGEERR	QKLENTFSLY	RCHT	255
UmSDH2 res	.....	.....	.....	.....	.....	.....	.....	255
THTG_04978	.....	.....	.....	.....	.....T...K	T.....	A..R..	259
UmSDH2 sen	MNCsRtCPKN	LNPGKAIAQI	KKDMAVGAP -	KASERPIMAS	S 295			
UmSDH2 res	.....	.....	.....	.....	.....			295
THTG_04978	...T.....S	...A.....T.	...E.ST...A	.STD.....P.	N 300			

**Fig. S3: Sequence comparison of the succinate dehydrogenase.** *UmSdh2* (UMAG\_00844) exists in two isoforms that differ in only one amino acid (marked in grey). The carboxin-resistant version carries a leucine instead of a histidine in position 253 (Keon et al., 1991 [41]). *T. thlaspeos* has a homolog that has 82 % amino acid similarity, but has an arginine in the resistance-mediating position. This difference might explain the lower sensitivity against carboxin compared to *U. maydis*.