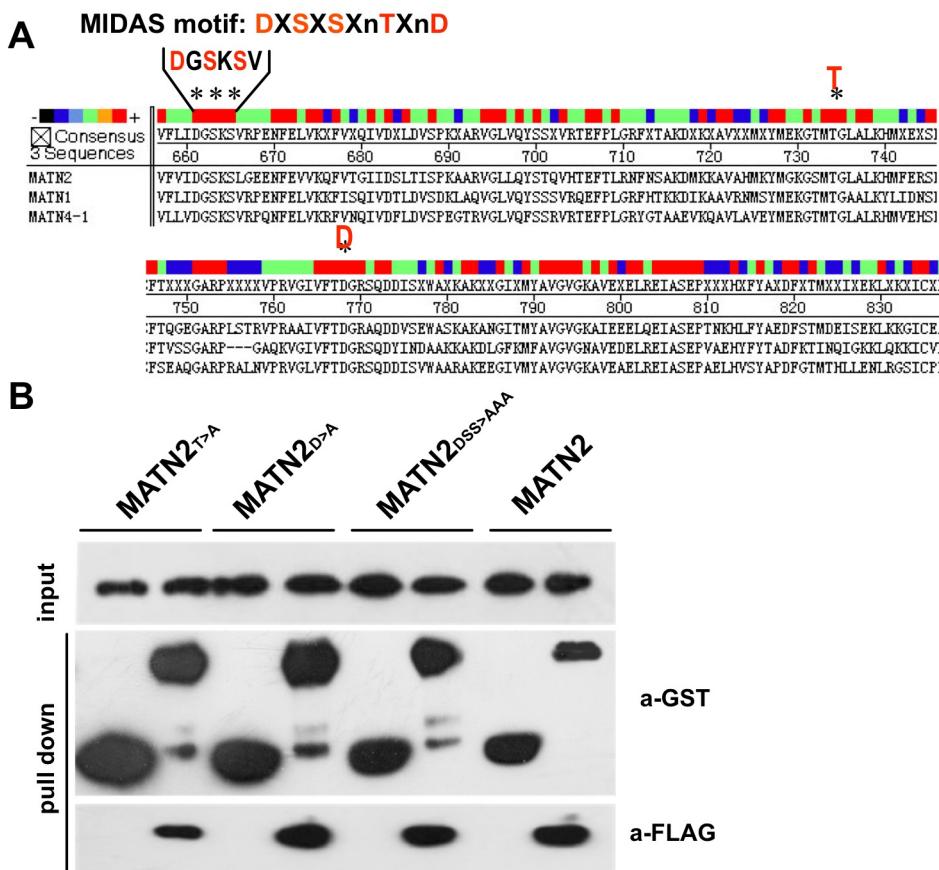


## Supplementary Information

**Supplementary Figure 1. Analysis of binding between YopK and MATN2 truncants with mutations in the MIDAS motif.** GST pull-down assay results showed that none of these mutations influenced the binding of MTAN2 to YopK.

**Supplementary Table 1. Primers used in this study.**



**Supplementary Figure 1**

**Supplementary Table 1 . Primers used in this study.**

Primers	Sequence (5'-3')	Usages
YopK-KF	ATGTTTATTAAAGATACTTATAACATGCGTGCTTATGTAGTAGGTAGGCTGGAGCTGCTT	(Gene knockout
YopK-KR	TCATCCCATAATACATTCTGATCGCAGGATTCGCGACTCCATATGAATATCCTCCTTA	Gene knockout
YopK-CF	gatcgatctCTGGCAATGAACGATAGAGC	Complement plasmid construction
YopK-CR	gatggatccTCAGGAGGCAATAGATACGG	Complement plasmid construction
YopK-Exp-F	gateggatccATGTTTATTAAAGATACTTATAACATGCG	Consturction of GST-YopK, expression plasmid
YopK-Exp-R	gatcgacTCATCCCATAATACATTCTGATC	Consturction of GST-YopK, GST-YopK <sub>91-182</sub> and YopK <sub>Δ91-124</sub> expression plasmid
MATN2-F1	ATGTGCGGCCGCAGGCTGTGAACACACATTGTGTGAACAGTG	Consturction of pFLAG-MATN2 <sub>574-903</sub> expression plasmid
MATN2-R1	CGACGGTACCCCTGGCCCTTCTCCTGGGTAAAACCTT	Consturction of pFLAG-MATN2 <sub>574-903</sub> expression plasmid
MATN2-F2	ATGTGCGGCCGCACCCCTTCCACAAGGGTGCCCAGAGCAG	Consturction of pFLAG-MATN2 <sub>904-956</sub> expression plasmid
MATN2-R2	CGACGGTACCTCATCTGTATCTCAGGCGATTTCCAGG	Consturction of pFLAG-MATN2 <sub>904-956</sub> expression plasmid
MATN2-F3	ATGTGCGGCCGCAGGAAGACGGTGCAAGAAAT	Consturction of pFLAG-MATN2 <sub>642-892</sub> expression plasmid
MATN2-R3	CGACGGTACCTCTGTATCTCAGGCGATTTCCAGG	Consturction of pFLAG-MATN2 <sub>642-892</sub> expression plasmid
MATN2-Mut-1-F	GACCTGGTCTTGTATCGCTGGATCCAAGAGTCTTGGAG	Consturction of pFLAG-MATN2 <sub>D&gt;A</sub> expression plasmid
MATN2-Mut-1-R	CTCCAAGACTCTGGATCCAGCGATCACAAAGACCAGGTC	Consturction of pFLAG-MATN2 <sub>D&gt;A</sub> expression plasmid
MATN2-Mut-2-F	GGTCTTGATCGATGGAGCCAAGAGTCTTGGAGAAGAG	Consturction of pFLAG-MATN2 <sub>D&gt;A</sub> expression plasmid
MATN2-Mut-2-R	CTCTTCTCCAAGACTCTGGCTCCATCGATCACAAAGACC	Consturction of pFLAG-MATN2 <sub>D&gt;A</sub> expression plasmid
MATN2-Mut-3-F	GTGATCGATGGATCCAAGGCTTGAGAAGAGAATTGAG	Consturction of pFLAG-MATN2 <sub>T&gt;A</sub> expression plasmid

MATN2-Mut-3-R	CTCAAAATTCTCTTCTCCAAGAGCCTGGATCCATCGATCAC	Consturction of pFLAG-MATN2 <sub>T&gt;A</sub> expression plasmid
MATN2-Mut-4-F	GGGAAAGGGCTCTATGGCTGGCTGCCCTGAAACAC	Consturction of pFLAG-MATN2 <sub>T&gt;A</sub> expression plasmid
MATN2-Mut-4-R	GTGTTCAAGGCCAGCCCAGCCATAGAGCCCTTCCC	Consturction of pFLAG-MATN2 <sub>T&gt;A</sub> expression plasmid
MATN2-Mut-5-F	GCCATTGTGTCACCGCCGGACGGGCTCAGGATGACG	Consturction of pFLAG-MATN2 <sub>DSS&gt;AAA</sub> expression plasmid
MATN2-Mut-5-R	CGTCATCCTGAGCCCGTCCGGCGGTGAACACAATGGC	Consturction of pFLAG-MATN2 <sub>DSS&gt;AAA</sub> expression plasmid
MATN2-Mut-6-F	GACCTGGTCTTGATCGCTGGAGCCAAGGCTTGGAGAAGAG	Consturction of pFLAG-MATN2 <sub>DSS&gt;AAA</sub> expression plasmid
MATN2-Mut-6-R	CTCTCTCCAAGAGCCTGGCTCCAGCGATCACAAAGACCAGGTC	Consturction of pFLAG-MATN2 <sub>DSS&gt;AAA</sub> expression plasmid
TEM-pBBR-F	CATGTCTAGATCTAGAATGGATCGGAGTAGGGATCGC	Construction of pBBR1-TEM
TEM-pBBR-R	TCAGGAGCTCGAGCTCTTACCAATGCTTAATCAGTGAGGCAC	Construction of pBBR1-TEM
YopE-pBBR-F	TCATGGTACCTGCCGACAGGATGCTCTG	Clone YopE to pBBR1-TEM
YopE-pBBR-R	CATGTCTAGACATCAATGACAGTAATTCTGCATC	Clone YopE to pBBR1-TEM
YopK-pBBR-F	TCATGGTACCCCTGGCAATGAACGATAGAGC	Clone YopK to pBBR1-TEM
YopK-pBBR-R	CATGTCTAGAGGAGGCAATAGATAACCG	Clone YopK to pBBR1-TEM
YopK-1F	gatcgatccATGTTATTAAAGATACTTATAACATGCG	Consturction of GST-YopK <sub>1-60</sub> expression plasmid
YopK-1R	gategtcgacTTAACGTGGTTCAATCCCTA	Consturction of GST-YopK <sub>1-60</sub> expression plasmid
YopK-2F	gateggatccATGTTATTAAAGATACTTATAACATGCG	Consturction of GST-YopK <sub>1-124</sub> expression plasmid
YopK-2R	gatcgatccACTGTCTTTCCCTATGAACAC	Consturction of GST-YopK <sub>1-124</sub> expression plasmid
YopK-3-F	gatcgatccAGTGGATCAATATTATCTACTTTAGAAGAG	Consturction of GST-YopK <sub>61-182</sub> expression plasmid
YopK-3-R	gategtcgacTCATCCCATAATACATTCTGATCGC	Consturction of GST-YopK <sub>61-182</sub> expression plasmid
YopK-4-F	gatcgatccGACACCAATTAAAGAAACTACCC	Consturction of GST-YopK <sub>91-182</sub> expression plasmid
YopK-1-90-F	gatcgatccATGTTATTAAAGATACTTATAACATGCG	Amplification of 1~270 bp of <i>yopK</i>
YopK-1-90-R	gateGAATTCAATATCGCTGACATGTTGCCATT	Amplification of 1~270 bp of <i>yopK</i>
YopK-125-182-F	gatcGAATTGaaaggaaatagaattttatgatc	Amplification of 376~549 bp of <i>yopK</i>
YopK-125-182-R	gateGTCGACTCATCCCATATACATTCTGATCGC	Amplification of 376~549 bp of <i>yopK</i>