

**Table 8. Top liquid-association pairs (LAPs) of AVT4 (YNL101W)**

Top 10 positive LAPs scouted by AVT4	Top 11-20 positive LAPs scouted by AVT4	Top 10 negative LAPs scouted by AVT4	Top 11-20 negative LAPs scouted by AVT4
RPD3 TIF5	IMP4 RPD3	AUT7 CLC1	YKL091C YNL100W
PDX1 YOR146W	PDX1 YLR002C	YPT52 GSY1	PDX1 YKL091C
RMT2 PDX1	YIL088C NIP7	AUT7 YNL100W	SDS24 YDR199W
PDX1 NOP2	MAK5 PDX1	SRV2 GLC3	YLR149C PUP1
YBR267W PDX1	HRT2 YNL114C	AUT7 GLO1	AUT7 SRV2
RPD3 YOR146W	YIL088C YNL114C	YGL161C PRE6	RPT6 AYR1
PDX1 YNL022C	PDX1 IMP4	AUT7 YPL087W	ARC19 YNL100W
YMR134W YNL114C	RRP3 RPD3	AUT7 UBP2	PDX1 YLR149C
YNL022C RPD3	PRE6 YOR146W	PDX1 TPS1	IKS1 RPD3
YJR071W RPD3	HRT2 ALR1	CLC1 YKL091C	TPS1 PRE6

The newly identified role of *AVT4* in efflux of tyrosine and other large neutral amino acids helps explain the appearance of several genes involved in autophagy, protein degradation, and transport, colored in red, among the top 20 negative LAPs of *AVT4*. Somewhat unexpectedly, *PDX1* appears 11 times.

AUT7 ESSENTIAL FOR AUTOPHAGY  
 PRE6 20S PROTEASOME SUBUNIT ALPHA4  
 PUP1 20S PROTEASOME SUBUNIT BETA2  
 RPT6 26S PROTEASOME REGULATORY SUBUNIT  
 UBP2 UBIQUITIN SPECIFIC PROTEINASE  
 CLC1 CLATHRIN LIGHT CHAIN

YPT52 GTP BINDING PROTEIN OF THE RAB FAMILY

AYR1 1-ACYLDIHYDROXYACETONE PHOSPHATE REDUCTASE; localized in ER and lip particles

PDX1 PYRUVATE DEHYDROGENASE COMPLEX PROTEIN X

RPD3 HISTONE DEACETYLASE B

RRP3 REQUIRED FOR MATURATION OF THE 35S PRIMARY TRANSCRIPT

IMP4 COMPONENT OF THE U3 SMALL NUCLEOLAR RIBONUCLEOPROTEIN

HRT2 HIGH LEVEL EXPRESSION REDUCED TY3 TRANSPOSITION

MAK5 ATP DEPENDENT RNA HELICASE

NIP7 REQUIRED FOR EFFICIENT 60S RIBOSOME SUBUNIT BIOGENESIS

NOP2 NUCLEOLAR PROTEIN

RMT2 N DELTA ARGININE METHYLTRANSFERASE

TIF5 TRANSLATION INITIATION FACTOR EIF5

GSY1 UDP GLUCOSE -STARCH GLUCOSYLTRANSFERASE ISOFORM 1

GLC3 1-4-GLUCAN BRANCHING ENZYME, GLYCOGEN BRANCHING ENZYME\*

TPS1 ALPHA ALPHA TREHALOSE PHOSPHATE SYNTHASE 56-kDa SUBUNIT

GLO1 GLYOXALASE I

SDS24 STRONG SIMILARITY TO HYPOTHETICAL PROTEIN YGL056C

SRV2 ADENYLATE CYCLASE ASSOCIATED PROTEIN 70 kDa

ARC19 SUBUNIT OF THE ARP2/3 COMPLEX

IKS1 IRA1-KINASE SUPPRESSOR

ALR1 DIVALENT CATION TRANSPORTER

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