

**Up-regulated SLC25A39 promotes cell growth and metastasis via regulating ROS  
production in colorectal cancer**

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**Table S1. Primary antibodies used for immunohistochemistry and western blot.**

Antibody	Company (Cat. No.)	Working dilutions
SLC25A39	Novus (NBP1-59600)	WB: 1/1000 IHC: 1/200
GAPDH	Proteintech (60004-1-1g)	WB: 1/3000

**Table S2. Sequence of primers****1. Primers used in qPCR**

SLC25A39	Forward primer	TCGTGAAGATCGTGAGGCAC
	Reverse primer	GGCTCGACCACACAGGAAG
$\beta$ -actin	Forward primer	ACTCTTCCAGCCTTCCTTCC
	Forward primer	TCTCCTTCTGCATCCTGTCTCG

**2. siRNA**

SLC25A39	sense	ACUGUGCCAGCUACCGCCAUCUACU
	antisense	AGUAGAUGGCGGUAGCUGGCACAGU

**Table S3. Clinical characteristics between low- and high-expression of SLC25A39 groups in TCGA-COAD**

Factors	n	SLC25A39		c2	P value
		Lower expression(204)	Higher expression(204)		
<b>Gender</b>					
Male	220	99	121	4.774	<b>0.029</b>
Female	188	105	83		
<b>Age(years)</b>					
<60	116	63	53	1.205	0.272
≥60	292	141	151		
<b>T stage</b>					
T1+T2	81	41	40	0.015	0.901
T3+T4+T X	327	163	164		
<b>N stage</b>					
N0	238	111	127	2.582	0.108
N1+NX	170	93	77		
<b>Distant metastasis</b>					
M0	309	147	162	3.001	0.083
M1+MX	99	57	42		
<b>Tumor stage</b>					
Stage 1+2	230	108	122	1.953	0.162
Stage 3+4	178	96	82		

**Table S4. Clinical characteristics between low- and high-expression of SLC25A39 groups in self-acquired cohorts**

Factors	n	SLC25A39		c2	P value
		Lower expression(24)	Higher expression(25)		
<b>Gender</b>					
Male	29	14	15	0.014	0.905
Female	20	10	10		
<b>Age(years)</b>					
<60	18	8	10	0.234	0.628
≥60	31	16	15		
<b>T stage</b>					
T1+T2	17	11	6	2.576	0.109
T3+T4+T X	32	13	19		
<b>N stage</b>					
N0	19	7	12	1.829	0.176
N1+NX	30	17	13		
<b>Distant metastasis</b>					
M0	31	18	13	2.787	0.095
M1+MX	18	6	12		
<b>Tumor stage</b>					
Stage 1+2	25	13	12	0.186	0.666
Stage 3+4	24	11	13		

# Supplementary Figure and Figure legends

Figure S1

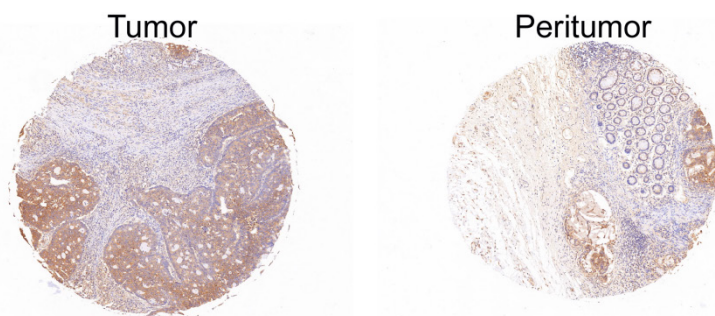
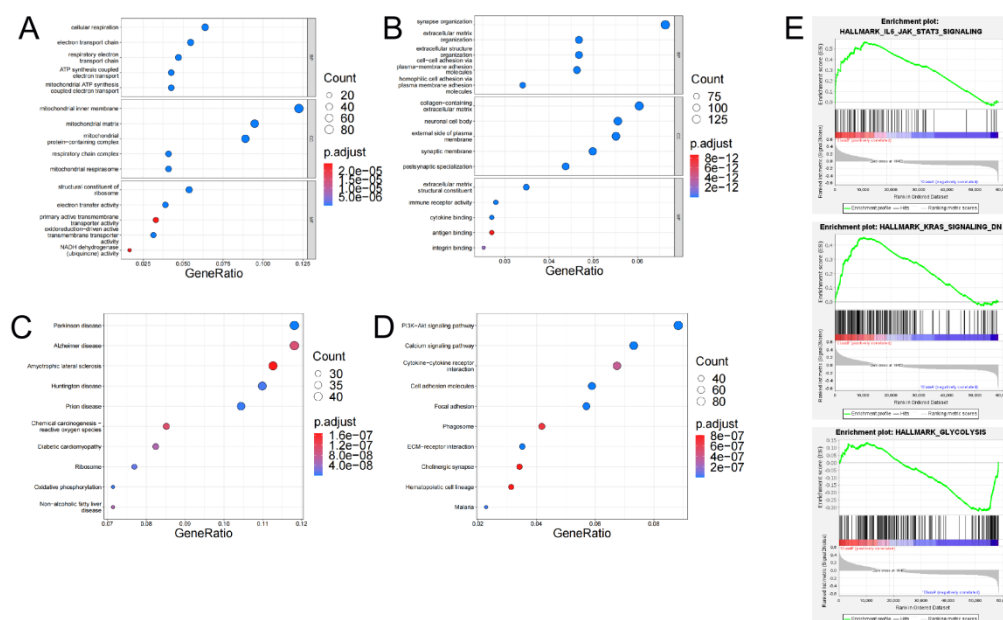
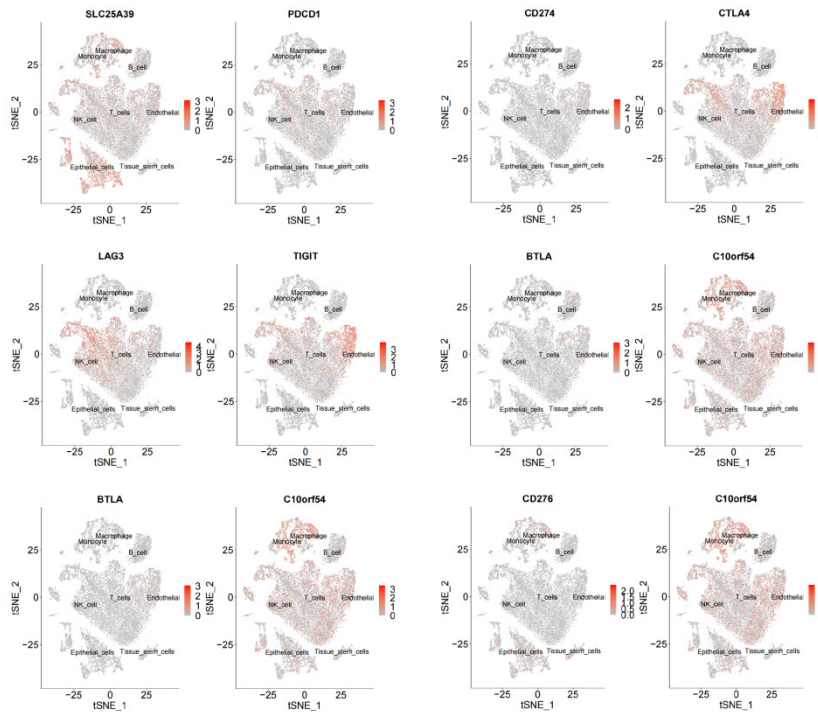


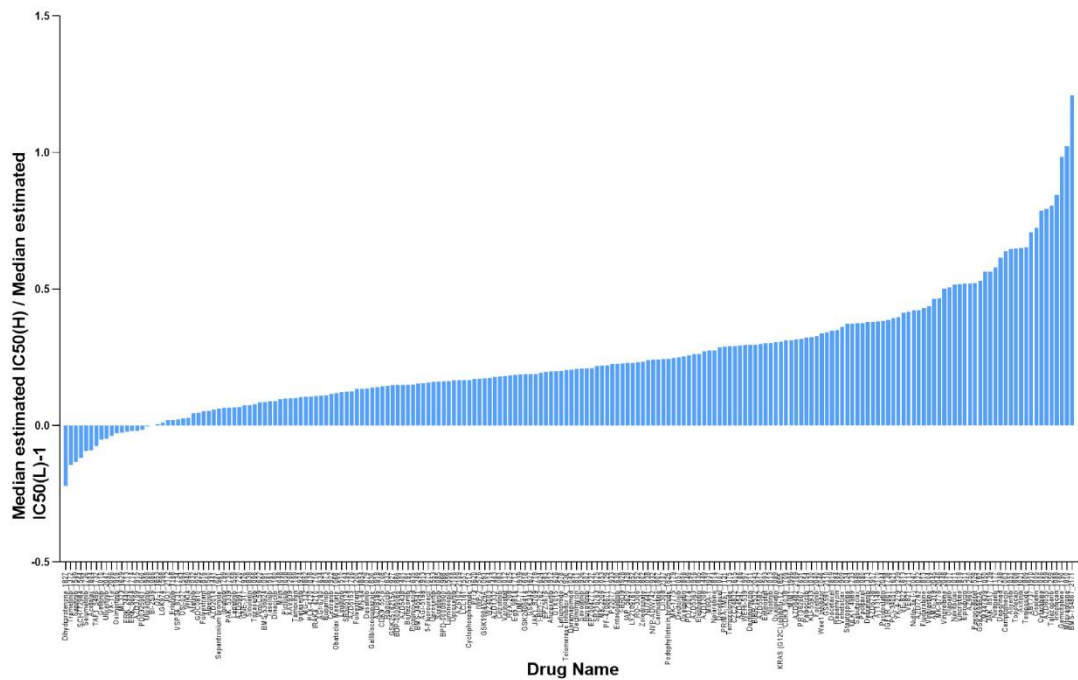
Figure S1. SLC25A39 is upregulated in colorectal carcinoma.



**Fig. S2** Enrichment analysis in high SLC25A39 expression group and low SLC25A39 expression group. **(A)** GO analysis based on the up-regulated DEGs between the high SLC25A39 expression group and low SLC25A39 expression group. **(B)** GO analysis based on the down-regulated DEGs between the high SLC25A39 expression group and low SLC25A39 expression group. **(C)** KEGG analysis based on the up-regulated DEGs between the high SLC25A39 expression group and low SLC25A39 expression group. **(D)** KEGG analysis based on the down-regulated DEGs between the high SLC25A39 expression group and low SLC25A39 expression group. **(E)** GSEA recognized different gene sets in the high SLC25A39 group.



**Fig. S3** The associations of SLC25A39 expression of tumor immune microenvironment and immunotherapy response.



**Fig. S4** SLC25A39 expression predicts drug therapeutic benefits in COAD. The Proportion of normalized IC50 value of the 198 drugs between the low SLC25A39 expression group and high SLC25A39 expression group.