

# **Role of the sodium-dependent organic anion transporter (SOAT/SLC10A6) in physiology and pathophysiology**

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## **Supplementary Material**

<b>Supplementary Table S1</b>	Compounds with low or no inhibitory effect on SOAT.
<b>Supplementary Table S2</b>	Number of analyzed tissues for RNA-seq data generated by GTEx (exported 2022/03).
<b>Supplementary Table S3</b>	Internet sources of SOAT (SLC10A6) IHC images accessed via the Human Protein Atlas (V21.0.proteinatlas.org).

**Supplementary Table S1.** Compounds with low or no inhibitory effect on SOAT.

Test compound	Inhibitor IC <sub>50</sub>
<b>Bile acids</b>	
Dehydrocholic acid	n.d. [1]
<b>Naphthyl derivatives</b>	
$\alpha$ -Naphthylamine	n.d. [1]
$\alpha$ -Naphthylisothiocyanate	n.d. [1]
$\alpha$ -Naphthylphosphate	n.d. [1]
<b>Non-steroidal organosulfates</b>	
2-Propylsulfate	n.d. [1]
5-Sulfooxymethylfurfural	n.d. [1]
Ethylsulfate	n.d. [1]
Hydroquinone sulfate	n.d. [1]
Indoxylsulfate	n.d. [1]
Phenylethylsulfate	n.d. [1]
Phenylsulfate	n.d. [1]
<b>Steroids</b>	
Aldosterone	>1000 $\mu$ M [48]
Androstendione	>1000 $\mu$ M [48]
Androsterone	>1000 $\mu$ M [48]
Cholesteryl sulfate	>1000 $\mu$ M [48]
Corticosterone	>1000 $\mu$ M [48]
Cortisol	>1000 $\mu$ M [48]
Digitoxigenin	>1000 $\mu$ M [48]
Digoxin	>1000 $\mu$ M [48]
Dihydrotestosterone	>1000 $\mu$ M [48]
17 $\beta$ -Estradiol	>1000 $\mu$ M [48]
Estrone	>1000 $\mu$ M [48]
Ethinylestradiol	~900 $\mu$ M [48]
Finasteride	>1000 $\mu$ M [48]
Ouabain	>1000 $\mu$ M [48]
Prednisolone	>1000 $\mu$ M [48]
Prednisone	>1000 $\mu$ M [48]
Progesterone	>1000 $\mu$ M [48]
Testosterone	>1000 $\mu$ M [48]
<b>Others</b>	
Ezetimibe	n.d. [14]
S 0381	~1000 $\mu$ M [48]
S 0925	~1000 $\mu$ M [48]
S 8005	~1000 $\mu$ M [48]
Wortmannin	>1000 $\mu$ M [48]

n.d. = not determined. The following [<sup>3</sup>H]DHEAS substrate concentrations were used: 2.5  $\mu$ M [1], 0.2  $\mu$ M [14, 48]. Where no IC<sub>50</sub> values were determined, 25  $\mu$ M [1] or 100  $\mu$ M [14] maximal inhibitory concentrations were used.

**Supplementary Table S2.** Number of analyzed tissues for RNA-seq data generated by GTEx (exported 2022/03).

<b>Tissue</b>	<b>Tissue expression data obtained via GTEx</b>	<b>Number of samples</b>
<b>Adipose tissue</b>	Adipose - Subcutaneous	663
	Adipose - Visceral (Omentum)	541
<b>Adrenal gland</b>	Adrenal Gland	258
<b>Amygdala</b>	Brain - Amygdala	152
<b>Breast</b>	Breast - Mammary Tissue	459
<b>Caudate</b>	Brain - Caudate (basal ganglia)	246
<b>Cerebellum</b>	Brain - Cerebellar Hemisphere	215
	Brain - Cerebellum	241
<b>Cerebral cortex</b>	Brain - Anterior cingulate cortex (BA24)	176
	Brain - Cortex	255
	Brain - Frontal Cortex (BA9)	209
<b>Cervix</b>	Cervix - Ectocervix	9
	Cervix - Endocervix	10
<b>Colon</b>	Colon - Sigmoid	373
	Colon - Transverse	406
<b>Endometrium</b>	Uterus - Endometrium	16
<b>Esophagus</b>	Esophagus - Mucosa	555
<b>Fallopian tube</b>	Fallopian Tube	9
<b>Heart muscle</b>	Heart - Atrial Appendage	429
	Heart - Left Ventricle	432
<b>Hippocampus</b>	Brain - Hippocampus	197
<b>Hypothalamus</b>	Brain - Hypothalamus	202
<b>Kidney</b>	Kidney - Cortex	85
	Kidney - Medulla	4
<b>Liver</b>	Liver	226
<b>Lung</b>	Lung	578
<b>Nucleus accumbens</b>	Brain - Nucleus accumbens (basal ganglia)	246
<b>Ovary</b>	Ovary	180
<b>Pancreas</b>	Pancreas	328
<b>Pituitary gland</b>	Pituitary	283
<b>Prostate</b>	Prostate	245
<b>Putamen</b>	Brain - Putamen (basal ganglia)	205
<b>Retina</b>	Retina	105
<b>Salivary gland</b>	Minor Salivary Gland	162
<b>Skeletal muscle</b>	Muscle - Skeletal	803
<b>Skin</b>	Skin - Not Sun Exposed (Suprapubic)	604
	Skin - Sun Exposed (Lower leg)	701
<b>Small intestine</b>	Small Intestine - Terminal Ileum	187
<b>Spinal cord</b>	Brain - Spinal cord (cervical c-1)	159
<b>Spleen</b>	Spleen	241
<b>Stomach</b>	Stomach	359
<b>Substantia nigra</b>	Brain - Substantia nigra	139
<b>Testis</b>	Testis	361
<b>Thyroid gland</b>	Thyroid	653
<b>Urinary bladder</b>	Bladder	21
<b>Vagina</b>	Vagina	156

**Supplementary Table S3.** Internet sources of SOAT (SLC10A6) IHC images accessed via the Human Protein Atlas (V21.0.proteinatlas.org).

Normal Tissue	URL: <a href="http://www.proteinatlas.org">www.proteinatlas.org</a> ...	Patient ID
<b>Breast</b>	/ENSG00000145283-SLC10A6/tissue/breast#img	3544
<b>Bronchus</b>	/ENSG00000145283-SLC10A6/tissue/bronchus#img	3482
<b>Cervix</b>	/ENSG00000145283-SLC10A6/tissue/cervix#img	3313
<b>Esophagus</b>	/ENSG00000145283-SLC10A6/tissue/esophagus#img	3197
<b>Nasopharynx</b>	/ENSG00000145283-SLC10A6/tissue/nasopharynx#img	2688
<b>Oral mucosa</b>	/ENSG00000145283-SLC10A6/tissue/oral+mucosa#img	2550
<b>Prostate</b>	/ENSG00000145283-SLC10A6/tissue/prostate#img	2053
<b>Skin</b>	/ENSG00000145283-SLC10A6/tissue/skin#img	3403
<b>Stomach</b>	/ENSG00000145283-SLC10A6/tissue/stomach#img	2130
<b>Tonsil</b>	/ENSG00000145283-SLC10A6/tissue/tonsil#img	2615
<b>Vagina</b>	/ENSG00000145283-SLC10A6/tissue/vagina#img	2480
Cancer Tissue	URL: <a href="http://www.proteinatlas.org">www.proteinatlas.org</a> ...	Patient ID
<b>Pancreas Carcinoid</b>	/ENSG00000145283-SLC10A6/pathology/carcinoid#img	2618
<b>Lung Cancer</b>	/ENSG00000145283-SLC10A6/pathology/lung+cancer#img	2354
<b>Skin Cancer</b>	/ENSG00000145283-SLC10A6/pathology/skin+cancer#img	3520
<b>Cervix Cancer</b>	/ENSG00000145283-SLC10A6/pathology/cervical+cancer#img	470
<b>Head and Neck Cancer</b>	/ENSG00000145283-SLC10A6/pathology/head+and+neck+cancer#img	1743
<b>Urothelial Cancer</b>	/ENSG00000145283-SLC10A6/pathology/urothelial+cancer#img	1871

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