

SLC28 – Na⁺-coupled nucleoside transport family

Human gene name	Protein name	Aliases	Predominant substrates	Transport type / coupling ions ^{*)}	Tissue distribution and cellular / subcellular expression	Link to disease	Human gene locus	Sequence accession ID	Splice variants and their features
SLC28A1	CNT1		pyrimidine nucleosides, adenosine	C / Na ⁺ / pyrimidine nucleosides	liver, kidney, small intestine, (epithelial apical membrane)		15q25-q26	NM_004213 NM_201651	additional 116 bp in 5' untranslated region, obtained from human fetal liver cDNA library, unknown function
SLC28A2	CNT2	SPNT1, FLJ21468, HsT17153, MGC138252	purine nucleosides, uridine	C / Na ⁺ / purine nucleosides	kidney (apical membrane), liver, heart, brain, placenta, pancreas, skeletal muscle, colon, rectum, small intestine, lymphocytes		15q15	NM_004212	
SLC28A3	CNT3		broadly selective for pyrimidines and purines	C / 2Na ⁺ / pyrimidine and purine nucleosides	pancreas, trachea, bone marrow, and mammary gland, intestine, brain, heart, prostate, liver		9q22.2	NM_022127	

*) C: Cotransporter; E: Exchanger; F: Facilitated transporter; O: Orphan transporter

References:

Original version of the SLC table:

[Gray JH, Owen RP, Giacomini KM.](#) The concentrative nucleoside transporter family, SLC28. Pflugers Arch. 2004 Feb;447(5):728-34

Questions & Comments