SLC29 – Facilitative nucleoside transporter 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
SLC29A1	ENT1	MGC1465, MGC3778	Purine and pyrimidine nucleosides	F	ubiquitous, plasma membrane (basolateral in polarized renal epithelial cells), perinuclear membranes		6p21.2-p21.1	NM_001078177 NM_001078175 NM_001078176 NM_001078174 NM_004955.2	variants 2-5 differ in 5'UTR compared to variant 1 (encode the same protein)
SLC29A2	ENT2	DER12, HNP36	Purine and pyrimidine nucleosides and nucleobases	F	ubiquitous, plasma membrane (basolateral in polarised renal epithelial cells), particularly abundant in skeletal muscle		11q13	NM_001532	
SLC29A3	ENT3	FLJ11160	Purine and pyrimidine nucleosides and some nucleobases	not determined	widely distributed, possibly intracellular	cutaneous hyperpigmentation, hypertrichosis, hepatosplenomegaly, heart anomalies, hearing loss, hypogonadism	10q22.1	NM_018344.4	
SLC29A4	ENT4	PMAT, FLJ34923	Adenosine	not determined	widely distributed		7p22.1	NM_001040661 NM_153247.2	variant 2 differs in 5' UTR compared to variant 1 (variants 1 and 2 encode the same protein)

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

References:

Original version of the SLC table:

Baldwin SA, Beal PR, Yao SY, King AE, Cass CE, Young JD. The equilibrative nucleoside transporter family, SLC29. Pflugers Arch. 2004 Feb;447(5):735-43.

Questions & Comments