

SLC42 – Rh ammonium 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
SLC42A1	RhAG	Rh50A	NH ₄ ⁺ , (CO ₂)	E / H ⁺	red blood cells, (cell membrane)	regular type Rh-null hemolytic anemia, Rh-modsyndrome, overhydrated hereditary stomatocytosis	6p21.1-p11	NM_000324.2	
SLC42A2	RhBG		NH ₄ ⁺	E / H ⁺	kidney, liver (basolateral membrane)		1q21.3	NM_020407.3	2 splice variants
SLC42A3	RhCG	RhGK	NH ₄ ⁺	E / H ⁺	kidney (apical membrane), brain, testis, placenta, pancreas, prostate	(distal renal tubular acidosis, decreased male fertility)	15q25	NM_016321	

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

References:

Original version of the SLC table:

[Nakhoul NL, Hamm LL](#). Non-erythroid Rh glycoproteins: a putative new family of mammalian ammonium transporters. *Pflugers Arch.* 2004 Feb;447(5):807-12.

Questions & Comments