

## SLC3 – Heavy subunits of the heteromeric amino acid transporters

Human gene name	Protein name	Aliases	Predominant substrates	Transport type / coupling ions <sup>*)</sup>	Tissue distribution and cellular / subcellular expression	Link to disease	Human gene locus	Sequence accession ID	Splice variants and their features
<a href="#">SLC3A1</a>	rBAT	NBAT, D2H,	system b <sup>0,+</sup> Heterodimerizes with light subunit SLC7A9	E (see details in SLC7 table)	kidney, small intestine, (apical membrane), liver, pancreas	classic cystinuria type I, homozygous 2p16 deletion syndrome	2p16.3	<a href="#">NM_000341</a>	
<a href="#">SLC3A2</a>	4F2hc	CD98hc,	Systems L, y <sup>+</sup> L, X <sub>c</sub> <sup>-</sup> and asc with light subunits SLC7A5-8 and SLC7A10-11	E (see details in SLC7 table)	ubiquitous, (basolateral membrane)		11q13	<a href="#">NM_002394</a> <a href="#">NM_001012661</a> <a href="#">NM_001012662</a> <a href="#">NM_001012663</a> <a href="#">NM_001012664</a> <a href="#">NM_001013251</a>	6 splice variants

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

### References:

Original version of the SLC table:

[Palacin M, Kanai Y.](#) The ancillary proteins of HATs: SLC3 family of amino acid transporters. Pflugers Arch. 2004 Feb;447(5):490-4

Questions & Comments