

SLC14 family of facilitative urea transporters in GtoPdb v.2023.1

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Abstract

As a product of protein catabolism, urea is moved around the body and through the kidneys for excretion. Although there is experimental evidence for concentrative urea transporters, these have not been defined at the molecular level. The SLC14 family are facilitative transporters, allowing [urea](#) movement down its concentration gradient. Multiple splice variants of these transporters have been identified; for UT-A transporters, in particular, there is evidence for cell-specific expression of these variants with functional impact [6, 1]. Topographical modelling suggests that the majority of the variants of SLC14 transporters have 10 TM domains, with a glycosylated extracellular loop at TM5/6, and intracellular C- and N-termini. The UT-A1 splice variant, exceptionally, has 20 TM domains, equivalent to a combination of the UT-A2 and UT-A3 splice variants.

Contents

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[GtoPdb](#) is an expert-driven guide to pharmacological targets and the substances that act on them. GtoPdb is a reference work which is most usefully represented as an on-line database. As in any publication this work should be appropriately cited, and the papers it cites should also be recognized. This document provides a citation for the relevant parts of the database, and also provides a reference list for the research cited by those parts. For further details see [2].

Please note that the database version for the citations given in GtoPdb are to the most recent preceding version in which the family or its subfamilies and targets were substantially changed. The links below are to the current version. If you need to consult the cited version, rather than the most recent version, please contact the GtoPdb curators.

Database links

[SLC14 family of facilitative urea transporters](#)

<https://www.guidetopharmacology.org/GRAC/FamilyDisplayForward?familyId=186>

Transporters

[UT-B\(Erythrocyte urea transporter\)](#)

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=982>

[UT-A\(Kidney urea transporter\)](#)

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=983>

References

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