

## SLC39 family of metal ion transporters in GtoPdb v.2023.1

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### Abstract

Along with the [SLC30 family](#), SLC39 family members regulate zinc movement in cells. SLC39 metal ion transporters accumulate zinc into the cytosol. Membrane topology modelling suggests the presence of eight TM regions with both termini extracellular or in the lumen of intracellular organelles. The mechanism for zinc transport for many members is unknown but appears to involve co-transport of bicarbonate ions [3, 4].

### Contents

This is a citation summary for SLC39 family of metal ion transporters in the [Guide to Pharmacology](#) database (GtoPdb). It exists purely as an adjunct to the database to facilitate the recognition of citations to and from the database by citation analyzers. Readers will almost certainly want to visit the relevant sections of the database which are given here under database links.

[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 [1].

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

#### SLC39 family of metal ion transporters

<https://www.guidetopharmacology.org/GRAC/FamilyDisplayForward?familyId=228>

#### Transporters

[ZIP1\(Zinc transporter 1\)](#)

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=1180>

[ZIP2\(Zinc transporter 2\)](#)

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=1181>

[ZIP3\(Zinc transporter 3\)](#)

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=1182>

[ZIP4\(Zinc transporter 4\)](#)

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=1183>

[ZIP5\(Zinc transporter 5\)](#)

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=1184>

[ZIP6\(Zinc transporter 6\)](#)

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=1185>  
ZIP7(Zinc transporter 7)

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=1186>  
ZIP8(Zinc transporter 8)

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=1187>  
ZIP9(Zinc transporter 9)

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=1188>  
ZIP10(Zinc transporter 10)

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=1189>  
ZIP11(Zinc transporter 11)

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=1190>  
ZIP12(Zinc transporter 12)

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=1191>  
ZIP13(Zinc transporter 13)

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=1192>  
ZIP14(Zinc transporter 14)

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=1193>

## References

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2. Dalton TP, He L, Wang B, Miller ML, Jin L, Stringer KF, Chang X, Baxter CS and Nebert DW. (2005) Identification of mouse SLC39A8 as the transporter responsible for cadmium-induced toxicity in the testis. *Proc Natl Acad Sci USA* **102**: 3401-6 [PMID:15722412]
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5. Liuzzi JP, Aydemir F, Nam H, Knutson MD and Cousins RJ. (2006) Zip14 (Slc39a14) mediates non-transferrin-bound iron uptake into cells. *Proc Natl Acad Sci USA* **103**: 13612-7 [PMID:16950869]