

3.6.5.2 Small monomeric GTPases in GtoPdb v.2025.3

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Abstract

Small G-proteins, are a family of hydrolase enzymes that can bind and hydrolyze guanosine triphosphate (GTP). They are a type of G-protein found in the cytosol that are homologous to the alpha subunit of heterotrimeric G-proteins, but unlike the alpha subunit of G proteins, a small GTPase can function independently as a hydrolase enzyme to bind to and hydrolyze a guanosine triphosphate (GTP) to form guanosine diphosphate (GDP). The best-known members are the Ras GTPases and hence they are sometimes called Ras subfamily GTPases.

Contents

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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

3.6.5.2 Small monomeric GTPases

<https://www.guidetopharmacology.org/GRAC/FamilyDisplayForward?familyId=896>

RAS subfamily

<https://www.guidetopharmacology.org/GRAC/FamilyDisplayForward?familyId=897>

Introduction to RAS subfamily

<https://www.guidetopharmacology.org/GRAC/FamilyIntroductionForward?familyId=897>

Enzymes

HRAS

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=2822>

NRAS

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=2823>

KRAS

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=2824>

ARF GTPase 6

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=3324>

RAB subfamily

<https://www.guidetopharmacology.org/GRAC/FamilyDisplayForward?familyId=938>

Enzymes

RAB27A, member RAS oncogene family

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=2916>

RAB32, member RAS oncogene family

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