

Resource Summary Report

Generated by [kravitz2](#) on Aug 2, 2026

ODS/Shi

RRID:RGD_1559039

Type: Organism

Proper Citation

RRID:RGD_1559039

Organism Information

URL: <https://rgd.mcw.edu/rgdweb/report/strain/main.html?id=1559039>

Proper Citation: RRID:RGD_1559039

Description: Rattus norvegicus with name ODS/Shi from RGD.

Species: Rattus norvegicus

Notes: Dr. Susumu Makino and his colleagues found several animals that had gait abnormalities among Wistar rats maintained at Shionogi Co. They named these animals osteogenic disorder (OD) rats because they exhibited prominent bone and joint abnormalities and systemic bleeding. Subsequent studies revealed that these symptoms were derived from an ascorbic acid (vitamin C) deficiency arising from defective gulonolactone oxidase (GLO) activity. This characteristic was confirmed to be the result of a mutation involving the autosomal single recessive gene *od*. Scurvy due to L-gulonolactone oxidase deficiency; phenotype normalizes if supplied with ascorbic acid 300mg/kg/d. *od/od* rats are more susceptible to dental caries as compared with *+/+* rats, in only amoun parous females.

Catalog Number: 1559039

Background: inbred

Database: Rat Genome Database (RGD)

Database Abbreviation: RGD

Availability: Unknown

Alternate IDs: 1559039

Organism Name: ODS/Shi

Record Creation Time: 20230509T191932+0000

Record Last Update: 20260801T194014+0000

Ratings and Alerts

No rating or validation information has been found for ODS/Shi.

No alerts have been found for ODS/Shi.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: Rat Genome Database (RGD)

Usage and Citation Metrics

We have not found any literature mentions for this resource.