

Superoxide Dismutase 1 (SOD1)

Nathaniel Yomogida, SPT

Chloë Kerstein, SPT

Table of contents

1 Overview	1
2 Function	1
2.1 Prevention of Neuronal Degeneration	1
3 Mutation	1

1 Overview

Superoxide Dismutase 1 (SOD1) refers to a specific gene on chromosome 21¹.

2 Function

2.1 Prevention of Neuronal Degeneration

SOD1 encodes for enzymes such as [CuZnSOD](#). CuZnSOD along with the [other SOD isoforms](#) play a role in removing oxygen free radicals from the body¹. Gene mutations lead to less activity of CuZnSOD, resulting in accumulation of free radicals and resulting in neuronal degeneration¹.

3 Mutation

one of 100s of mutations in SOD1 have been linked to hereditary [ALS](#)¹.

1. O'Sullivan SB, Schmitz TJ, Fulk GD, eds. *Physical Rehabilitation*. 7th ed. F.A. Davis Company; 2019.