
HAO1 Antibody Blocking Peptide

Catalog Number: bs-8602P

Activity: Not tested

Purification: HPLC

Storage: Shipped at 4°C. Stored at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: GOX is a 370 amino acid protein that is expressed in liver and pancreas. HAO1 is localized to peroxisomes and aids in organic acid metabolism via 2-hydroxyacid oxidase activity. 2-hydroxyacid oxidases, such as HAO1, are enzymes that require a flavin cofactor to oxidize 2-hydroxyacids to 2-ketoacids while reducing oxygen to hydrogen peroxide. HAO1 preferentially oxidizes the substrate glycolate and also oxidizes other substrates, including 2-hydroxy fatty acids as well as L-?hydroxy acids of moderately short chain lengths. The oxidation of glycolate yields glyoxylate which is utilized for peroxisomal synthesis of glycine. HAO1 is also able to convert glyoxylate to oxalate. HAO1 is thought to play a role in the pathophysiology of hyperoxaluria type 1, which is caused by defects in AGXT, a peroxisomal enzyme, leading to accumulation of glyoxylate. Hyperoxaluria type 1 is characterized by an accumulation of oxalate that is thought to lead to precipitates of calcium oxalate in kidneys which can be fatal.