

Catalog # 10-4423 Epairestat

ONO-2235

CAS# 82159-09-9

2-[(5Z)-5-[(E)-3-phenyl-2-methylprop-2-enylidene]- 4-oxo-2-thioxo-3-thiazolidinyl]acetic acid Lot # FBA1101

Epalrestat is an aldose reductase inhibitor (IC50 = 10 nM (rat lens) and 25 nM (human placenta).^{1,2} It reduces sorbitol accumulation in the sciatic nerve, erythrocytes and ocular tissue. May be used to prevent or slow the progression of diabetic neuropathy.³

- 1) Kikkawa et al. (1983) Effect of a new aldose reductase inhibitor, (E)-3-carboxymethyl-5-[(2E)-methyl-3-phenylpropenylidene]rhodanine (ONO-2235), on peripheral nerve disorders in streptozotocin diabetic rats Diabetologica **24** 290
- 2) Terashima et al. (1984) Effects of a new aldose reductase inhibitor on various tissues in vitro. J.Pharmacol.Exp.Ther. 229 226
- 3) Ramirez and Borja (2008) Epalrestat: an aldose reductase inhibitor for the treatment of diabetic neuropathy Pharmacotherapy **28** 646

PHYSICAL DATA

Molecular Weight: 319.40

Molecular Formula: C₁₅H₁₃NO₃S₂

Purity: >98% (TLC: 5% Methanol/methylene chloride + 0.5% HOAc; Rf = 0.21)

Solubility: DMSO (5 mg/ml)
Physical Description: Yellow solid

Storage and Stability: Store as supplied at -20° for up to one year from the date of purchase. Solutions in

DMSO may be stored at -20°C for up to 2 months

.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.