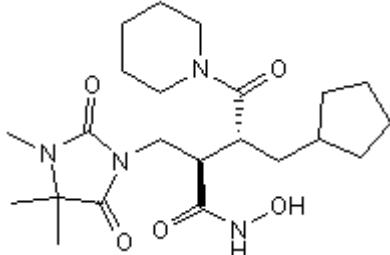


Certificate of Analysiswww.tocris.com**Product Name:** Ro 32-3555**Catalog No.:** 2916**Batch No.:** 3

CAS Number: 190648-49-8

IUPAC Name: $(\alpha R, \beta R)$ - β -(Cyclopentylmethyl)-N-hydroxy- γ -oxo- α -[(3,4,4-trimethyl-2,5-dioxo-1-imidazolidinyl)methyl]-1-piperidinebutanamide**1. PHYSICAL AND CHEMICAL PROPERTIES****Batch Molecular Formula:** C₂₂H₃₆N₄O₅. $\frac{1}{2}$ H₂O**Batch Molecular Weight:** 445.56**Physical Appearance:** White solid**Solubility:** DMSO to 100 mM
ethanol to 100 mM**Storage:** Store at -20°C**Batch Molecular Structure:****2. ANALYTICAL DATA****TLC:** R_f = 0.51 (Dichloromethane:Methanol [9:1])**HPLC:** Shows 97.7% purity**¹H NMR:** Consistent with structure**Mass Spectrum:** Consistent with structure**Microanalysis:** Carbon Hydrogen Nitrogen

Theoretical 59.31 8.37 12.57

Found 59.21 8.33 12.49

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Product Information

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Product Name: Ro 32-3555

Catalog No.: 2916

Batch No.: 3

CAS Number: 190648-49-8

IUPAC Name: $(\alpha R, \beta R)\text{-}\beta\text{-}(Cyclopentylmethyl)\text{-}N\text{-}hydroxy\text{-}\gamma\text{-}oxo\text{-}\alpha\text{-}[(3,4,4\text{-}trimethyl\text{-}2,5\text{-}dioxo\text{-}1\text{-}imidazolidinyl)methyl]\text{-}1\text{-}piperidinebutanamide}$

Description:

Potent, collagenase-selective MMP inhibitor (K_i values are 3.0, 3.4, 4.4, 59, 154 and 527 nM for MMP-1, MMP-13, MMP-8, MMP-9, MMP-2 and MMP-3 respectively). Inhibits cartilage breakdown *in vitro* and *in vivo* and displays antiarthritic activity. Orally active.

Physical and Chemical Properties:

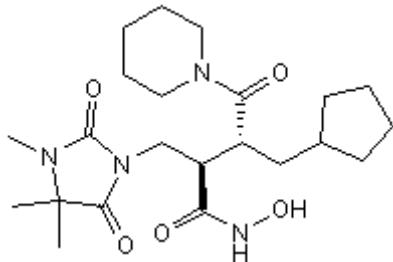
Batch Molecular Formula: $C_{22}H_{36}N_4O_5 \cdot \frac{1}{2}H_2O$

Batch Molecular Weight: 445.56

Physical Appearance: White solid

Minimum Purity: >97%

Batch Molecular Structure:



References:

- Lewis** *et al* (1997) Ro 32-3555, an orally active collagenase inhibitor, prevents cartilage breakdown *in vitro* and *in vivo*. *Br.J.Pharmacol.* **121** 540. PMID: 9179398.
- Broadhurst** *et al* (1997) Design and synthesis of the cartilage protective agent (CPA, Ro32-3555). *Bioorg.Med.Chem.Letts.* **7** 2299.
- Brewster** *et al* (1998) Ro 32-3555, an orally active collagenase selective inhibitor, prevents structural damage in the SRT/ORT mouse model of osteoarthritis. *Arthrit.Rheumat.* **41** 1639.

Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 100 mM
ethanol to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

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