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**Product Data Sheet**

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Product Name: Timegadine (SR1368)

Cat. No.: GC31965

**Chemical Properties**

Cas. No. 71079-19-1

SMILES CC1=NC2=CC=CC=C2C(/N=C(NC3CCCCC3)/NC4=NC=CS4)=C1Formula C<sub>20</sub>H<sub>23</sub>N<sub>5</sub>S M.Wt 365.5

Solubility Soluble in DMSO Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure **Protocol**

Female inbred Lewis rats (body weight ~150 g) are used in adjuvant arthritis and experimental allergic encephalomyelitis experiments. Paw volume is determined by mercury displacement plethysmometer. Timegadine is administered orally in a volume of 1 mL/kg body weight, suspended in 0.5% carboxymethylcellulose[1].

**Animal experiment:**

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

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### References:

[1]. George S, et al. The influence of food intake on the bioavailability of timegadine, a novel non-steroidal anti-inflammatory drug. Br J Clin Pharmacol. 1983 Apr;15(4):495-8.

[2]. Ahnfelt-Rønne I, et al. A new antiinflammatory compound, timegadine (N-cyclohexyl-N"-4-[2-methylquinolyl]-N'-2-thiazolylguanidine), which inhibits both prostaglandin and 12-hydroxyeicosatetraenoic acid (12-HETE) formation. Biochem Pharmacol. 1980 Dec;29(24):3265-9.

### Background

Timegadine, a new antiinflammatory agent, is found to be a potent, competitive inhibitor of cyclo-oxygenase (COX) and lipo-oxygenase, with IC50s ranging from 5 nM (washed rabbit platelets) to 20 µM (rat brain) for COX and 100 µM for lipo-oxygenase both in the cytosol fraction of horse platelet homogenates, and in washed rabbit platelets.

Timegadine, a new antiinflammatory agent, is found to be a potent, competitive inhibitor of of COX and lipo-oxygenase, with IC50s ranging from 5 nM (washed rabbit platelets) to 20 µM (rat brain) for COX and 100 µM for lipo-oxygenase both in the cytosol fraction of horse platelet homogenates, and in washed rabbit platelets[2].

Timegadine, a new antiinflammatory agent, is found to be a potent, competitive inhibitor of prostaglandin synthetase which also inhibits cyclo-oxygenase (COX) and lipoxygenase. Daily oral doses of 10 to 30 mg/kg of Timegadine significantly inhibit both the primary and secondary lesions of adjuvant arthritis when the treatment is initiated on the day of the disease induction and continues for 28 days. Timegadine is able specifically to prevent the development of the swelling of the non-injected paw until 28 days after the adjuvant injection when administered for 5 days prior to and 5 days after

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the induction of the disease, in analogy with the effect of cyclophosphamide[1].

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