

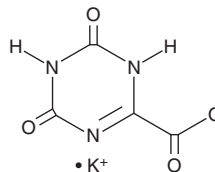
# PRODUCT INFORMATION



## Oxonic Acid (potassium salt)

Item No. 22586

**CAS Registry No.:** 2207-75-2  
**Formal Name:** 1,4,5,6-tetrahydro-4,6-dioxo-1,3,5-triazine-2-carboxylic acid, monopotassium salt  
**Synonyms:** Allantoxanic acid, Potassium oxonate  
**MF:**  $C_4H_2N_3O_4 \cdot K$   
**FW:** 195.2  
**Purity:**  $\geq 95\%$   
**UV/Vis.:**  $\lambda_{max}$ : 238 nm  
**Supplied as:** A crystalline solid  
**Storage:**  $-20^\circ C$   
**Stability:**  $\geq 4$  years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Oxonic acid (potassium salt) is supplied as a crystalline solid. Aqueous solutions of oxonic acid (potassium salt) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of oxonic acid (potassium salt) in PBS (pH 7.2) is approximately 0.3 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

Oxonic acid is a uricase inhibitor that prevents metabolism and excretion of uric acid (Item No. 16219) and induces embryotoxicity and nephrotoxicity in rats.<sup>1</sup> It is a component of S-1, a mixture containing a prodrug of the antitumor agent 5-fluorouracil (5-FU; Item No. 14416), that suppresses the gastrointestinal toxicity of 5-FU without inhibiting its antitumor activity in rats.<sup>2</sup> Formulations containing oxonic acid have been used to treat gastric, pancreatic, lung, head, neck, and breast carcinomas.<sup>3</sup>

### References

1. Gralla, E.J., and Crelin, E.S. Oxonic acid and fetal development: I. Embryotoxicity in mice. *Toxicology* **6(3)**, 289-297 (1976).
2. Yoshisue, K., Masuda, H., Matsushima, E., *et al.* Tissue distribution and biotransformation of potassium oxonate after oral administration of a novel antitumor agent (drug combination of tegafur, 5-chloro-2,4-dihydropyridine, and potassium oxonate) to rats. *Drug. Metab. Dispos.* **28(10)**, 1162-1167 (2000).
3. Chhetri, P., Giri, A., Shakya, S., *et al.* Current development of anti-cancer drug S-1. *J. Clin. Diagn. Res.* **10(11)**, XE01-XE05 (2016).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

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