

# PRODUCT INFORMATION



## R788 (sodium salt)

Item No. 18501

**CAS Registry No.:** 1025687-58-4  
**Formal Name:** 6-[[5-fluoro-2-[(3,4,5-trimethoxyphenyl)amino]-4-pyrimidinyl]amino]-2,2-dimethyl-4-[(phosphonoxy)methyl]-2H-pyrido[3,2-b]-1,4-oxazin-3(4H)-one, disodium salt

**Synonyms:** Fostamatinib, NSC 745942, R935788, Tamatinib Fosdium

**MF:** C<sub>23</sub>H<sub>24</sub>FN<sub>6</sub>O<sub>9</sub>P • 2Na

**FW:** 624.4

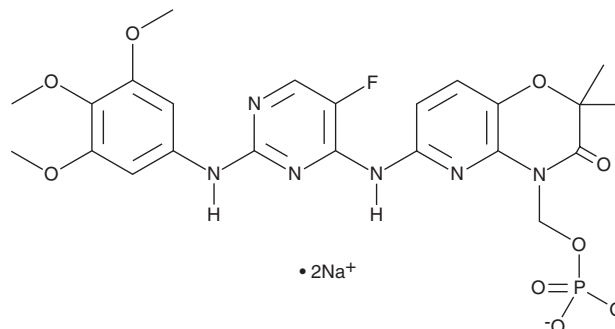
**Purity:** ≥95%

**UV/Vis.:** λ<sub>max</sub>: 277, 333 nm

**Supplied as:** A crystalline solid

**Storage:** -20°C

**Stability:** ≥4 years



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

### Laboratory Procedures

R788 (sodium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the R788 (sodium salt) in the solvent of choice, which should be purged with an inert gas. R788 (sodium salt) is soluble in methanol. The solubility of R788 (sodium salt) in methanol is approximately 3 mg/ml.

R788 (sodium salt) is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

### Description

Spleen tyrosine kinase (Syk) is a non-receptor tyrosine kinase that upon phosphorylation binds to immunoreceptor tyrosine-based activation motifs of FcRγ chains and mediates downstream signaling related to platelet function and inflammation. R788 is a prodrug of R406 (Item No. 11422), an inhibitor of Syk (K<sub>i</sub> = 30 nM).<sup>1</sup> R788 conversion to the biologically active R406 is catalyzed by the action of alkaline phosphatases present on the apical brush-border of the membranes of intestinal enterocytes.<sup>1</sup> It produces anti-inflammatory and immunomodulating effects by inhibiting Syk-mediated IgG Fcγ receptor signaling, which prevents activation of mast cells, macrophages, and B cells, as well as related inflammatory responses.<sup>1</sup> R788 has undergone clinical evaluation for efficacy in the treatment of rheumatoid arthritis.<sup>1</sup>

### Reference

1. Singh, R., Masuda, E.S., and Payan, D.G. Discovery and development of spleen tyrosine kinase (SYK) inhibitors. *J. Med. Chem.* **55**(8), 3614-3643 (2012).

#### 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.

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