# PRODUCT INFORMATION



## **Etelcalcetide (hydrochloride)**

Item No. 26901

CAS Registry No.: 1334237-71-6

Formal Name: N-acetyl-D-cysteinyl-D-alanyl-

> D-arginyl-D-arginyl-Dalanyl-D-argininamide, disulfide with L-cysteine, hydrochloride

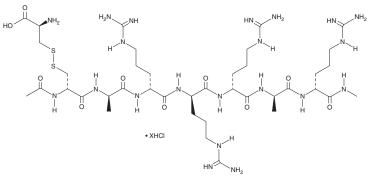
Synonyms: KAI 4169, Velcalcetide MF: C<sub>38</sub>H<sub>73</sub>N<sub>21</sub>O<sub>10</sub>S<sub>2</sub> • XHCI

FW: 1,048.3 **Purity:** ≥95%

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**

Etelcalcetide (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the etelcalcetide (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Etelcalcetide (hydrochloride) is soluble in the organic solvent DMSO at a concentration of approximately 10 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of etelcalcetide (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of etelcalcetide (hydrochloride) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

#### Description

Etelcalcetide is a peptide agonist of the calcium-sensing receptor (CaSR).<sup>1</sup> It is selective for CaSR over a panel of 33 receptors and ion channels, as well as the norepinephrine transporter at 10 μM. Etelcalcetide increases intracellular calcium levels in HEK293T cells expressing the human CaSR receptor with an EC<sub>50</sub> value of 0.53 μM. It also inhibits parathyroid secretion from primary rat parathyroid cells  $(EC_{50} = 0.36 \mu M)$  in the presence of calcium). Etelcalcetide (0.3, 1, and 3 mg/kg) decreases parathyroid hormone and calcium levels in plasma and serum, respectively, in a model of chronic renal insufficiency with secondary hyperthyroidism in nephrectomized rats fed a high-phosphorus diet. Formulations containing etelcalcetide have been used in the treatment of secondary hyperparathyroidism in adult patients with chronic kidney disease undergoing hemodialysis.

### Reference

1. Harada, K., Fujioka, A., Konno, M., et al. Pharmacology of Parsabiv® (etelcalcetide, ONO-5163/AMG 416), a novel allosteric modulator of the calcium-sensing receptor, for secondary hyperparathyroidism in hemodialysis patients. Eur. J. Pharmacol. 842, 139-145 (2019).

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

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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