

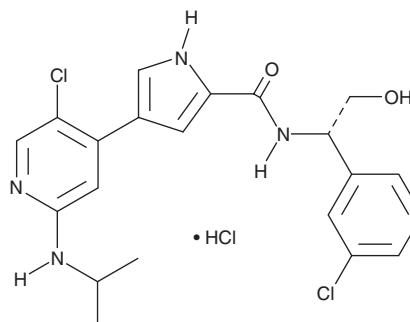
# PRODUCT INFORMATION



## Ulixertinib (hydrochloride)

Item No. 18298

**CAS Registry No.:** 1956366-10-1  
**Formal Name:** 4-[5-chloro-2-[(1-methylethyl)amino]-4-pyridinyl]-N-[(1S)-1-(3-chlorophenyl)-2-hydroxyethyl]-1H-pyrrole-2-carboxamide, monohydrochloride  
**Synonyms:** BVD-523, VRT-752271  
**MF:**  $C_{21}H_{22}Cl_2N_4O_2 \cdot HCl$   
**FW:** 469.8  
**Purity:**  $\geq 98\%$   
**UV/Vis.:**  $\lambda_{max}$ : 213, 252, 326 nm  
**Supplied as:** A crystalline solid  
**Storage:**  $-20^{\circ}C$   
**Stability:**  $\geq 2$  years



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

### Laboratory Procedures

Ulixertinib (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the ulixertinib (hydrochloride) in the solvent of choice. Ulixertinib (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of ulixertinib (hydrochloride) in ethanol is approximately 1 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Ulixertinib (hydrochloride) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ulixertinib (hydrochloride) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Ulixertinib (hydrochloride) has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Ulixertinib is a reversible ERK1/2 inhibitor that demonstrates an  $IC_{50}$  value of  $<0.3$  nM for ERK2.<sup>1</sup> In A375 melanoma cells with B-Raf<sup>V600E</sup> mutation, it has been reported to reduce the levels of phosphorylated ERK2 and the downstream kinase RSK ( $IC_{50}$ s = 4.1 and 0.14  $\mu$ M, respectively).<sup>1</sup> Ulixertinib has also been shown to inhibit A375 cell proliferation with an  $IC_{50}$  value of 180 nM.<sup>1</sup>

### Reference

1. Ward, R.A., Colclough, N., Challinor, M., *et al.* Structure-guided design of highly selective and potent covalent inhibitors of ERK1/2. *J. Med. Chem.* **58**(11), 4790-4801 (2015).

#### 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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