**Product Name:** VX-478 (Amprenavir)

**Catalog Number:** C8947

**Technical information:** 

 $C_{25}H_{35}N_3O_6S$ Chemical Formula:

> CAS #: 161814-49-9

Molecular Weight: 505.63

> Purity: > 98%

Appearance: White solid

Solubility: Soluble in DMSO up to 30 mM

(3S)-oxolan-3-yl N-[(2S,3R)-3-hydroxy-4-[N-(2-methylpropyl)(4-aminobenzene)sulfonamido]-1-Chemical Name:

phenylbutan-2-yl]carbamate

Storage: Store solid powder at 4°C desiccated; Store DMSO solution at -20°C.

In the unopened package, powder is stable for 1 year and DMSO solution is stable for 6 months Shelf Life:

under proper storage condition.

Handling: • To make 10 mM stock solution, add 0.198mL of DMSO for each mg of VX-478 (Amprenavir).

• For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum

(Amprenavir)

sample recovery.

**Biological Activity:** 

Amprenavir (Agenerase, VX-478), is an orally-available, sulfonamide-based inhibitor of HIV-1, with relatively weak potency towards HIV-2, at IC50 values of 0.6 and 19 nM, respectively. [1] Similar to other HIV-1 protease inhibitors, Amprenavir binds to the active site of HIV-1 and inhibits the processing of the gag and gag-pol polyprotein precursors. The drug concentration of Amprenavir required to reduce viral production by 50% (IC50) against HIV-1 strain IIIB was 0.08 uM in acutely infected cells and 0.41 uM in chronically infected cells. Using a different cell line derived from a human T-cell lymphoma, the IC90 of Amprenavir against HIV-1 strain IIIB was 0.079 uM. [1]

Human dose-escalation studies showed that Amprenavir was well tolerated at single doses up to 1200 mg with minimal effect on absorption by food administration, unlike with other protease inhibitors such as indinavir, nelfinavir, and saguinavir. [2]

- Reference: 1. Fung et al., Amprenavir: a new human immunodeficiency virus type 1 protease inhibitor. Clin. Therapeutics, 2000, 22(5), 549-572. Pubmed ID: 10868554
  - 2. Sadler et al., Safety and pharmacokinetics of amprenavir (141W94), a human immunodeficiency virus (HIV) type 1 protease inhibitor, following oral administration of single doses to HIV-infected adults. Antimicrob. Angets. Chemother. 1999, 43(7), 1686-1692. Pubmed ID: 10390223

To reorder: http://www.cellagentech.com/VX-478-Amprenavir/

For Technical Support: technical@cellagentech.com

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