biei resources

SUPPORTING INFECTIOUS DISEASE RESEARCH

Ritonavir

Catalog No. HRP-4622

This reagent is the property of the U.S. Government.

Product Description:

Ritonavir (brand name: Norvir[®]; also referred to as A-84538 and ABT-538) is a peptidomimetic inhibitor of both human immunodeficiency virus (HIV) type 1 and type 2 proteases. Inhibition of HIV proteases renders the enzyme incapable of processing the gag-pol polypeptide precursor, which leads to the production of non-infectious immature HIV particles.

| Chemical Name | 10-Hydroxy-2-methyl-5-(1-methylethyl)-1-[2-(1-methylethyl)-4-thiazolyl]-3,6- dioxo-8,11-bis(phenylmethyl)-2,4,7,12-tetraaztridecan-13-oic acid, 5-thiazolylmethyl ester, [5S-(5R*,8R*,10R*,11R*)] | | |
|------------------|---|--|--|
| Structure | | | |
| Formula | C ₃₇ H ₄₈ N ₆ O ₅ S ₂ | | |
| Molecular Weight | 720.94 | | |
| CAS Number | 155213-67-5 | | |

Lot: 70067169

Receipt Date: 10APR2024

All information below was provided by AK Scientific, Inc. for the bulk material (AK Scientific, Inc. lot TL34750).

| TEST | SPECIFICATIONS | RESULTS |
|---------------------|------------------------------------|------------------------------------|
| Appearance | White to off-white powder | White powder |
| Content per Vial | 20.0 mg ± 0.3 mg | 20.0 mg ± 0.3 mg |
| FT-IR | Spectrum consistent with structure | Spectrum consistent with structure |
| Heavy Metals | ≤ 20 ppm | < 20 ppm |
| Mass Spectrometry | Spectrum consistent with structure | Spectrum consistent with structure |
| Purity (HPLC) | ≥ 98% | 98.7% |
| Residue on Ignition | ≤ 0.2% | 0.04% |
| Residual Solvents | | |
| 2-Propanol | ≤ 500 ppm | 120 ppm |
| Ethyl acetate | ≤ 1,000 ppm | 460 ppm |
| Heptane | ≤ 500 ppm | 340 ppm |
| Methanol | ≤ 500 ppm | 160 ppm |
| MTBE | ≤ 500 ppm | Not detected |
| Tetrahydrofuran | ≤ 300 ppm | 130 ppm |
| Toluene | ≤ 300 ppm | 80 ppm |

BEI Resources www.beiresources.org E-mail: <u>contact@beiresources.org</u> Tel: 800-359-7370 Fax: 703-365-2898 bieii resources

Certificate of Analysis for HRP-4622

SUPPORTING INFECTIOUS DISEASE RESEARCH

| TEST | SPECIFICATIONS | RESULTS |
|-------------------------------|----------------|---------|
| Specific Rotation (c=2, MeOH) | +7° ~ +10° | +8.4° |
| Water | ≤ 0.5% | 0.06% |

/Kenneth R. Crawford/ Kenneth R. Crawford

23 MAY 2024

Lead Technical Writer or designee, ATCC Federal Solutions

ATCC[®], on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected by ATCC[®] and the contributor to the tests and procedures specified and that the results described, along with any other data provided in this certificate, are true and accurate to the best of ATCC[®]'s knowledge.

ATCC[®] is a trademark of the American Type Culture Collection.

You are authorized to use this product for research use only. It is not intended for human use.

