

Analytical Data Sheet

Lot number **1000009818**
not for drug use

Catalog number **B-1670.0005**
Product number **4013349.0005**
Product **Fmoc- Arg(Pmc) - OH**
Molecular formula $C_{35}H_{42}N_4O_7S$
Relative molecular mass 662.81

| Tests | Results |
|--|---|
| Appearance | white powder |
| Appearance of solution | clear, colorless solution (50 mg/mL in methanol) clear, colorless solution (0.5 mmol/mL in DMF) |
| Identification (TLC) | complies with authentic material |
| Specific optical rotation | <p>uncorrected:</p> $[\alpha]_D^{24} = -4.8^\circ$ (1% in dimethylformamide) $[\alpha]_{365}^{24} = -20.7^\circ$ (1% in dimethylformamide) |
| | <p>corrected for assay (titration):</p> $[\alpha]_D^{24} = -5.5^\circ$ (1% in dimethylformamide) $[\alpha]_{365}^{24} = -23.6^\circ$ (1% in dimethylformamide) |
| Purity (HPLC) | 99.34% (TFA) |
| Related impurities (HPLC) | 0.21%Fmoc-β-Ala-OH 0.02%Fmoc-β-Ala-Arg(Pmc)-OH 0.02%Fmoc-Arg(Pmc)-Arg(Pmc)-OH |
| Purity (TLC) | > 99% |
| Related impurities (TLC) | < 0.2% H-Arg(Pmc)-OH |
| TLC conditions | chloroform/methanol/toluene/H ₂ O 8/8/8/1 chloroform/methanol/acetic acid 85/10/5 chloroform/methanol/acetic acid/H ₂ O 70/42/0.5/10 plate: silicagel 60 F ₂₅₄ detected by: UV, ninhydrin, chlorine-tolidine |
| Enantiomer content (chiral chromatography) | 0.2% D-enantiomer |
| Assay (titration) | 90.3% (TBAH) |
| Water content (KF volumetric) | 0.2% |
| Acetic acid content (IC) | 0.013% |

Residual organic solvents (GC)

isopropylether 3.7%
acetonitrile not det.
dioxane 4.8%
isopropanol 0.1%
tetrahydrofuran not det.
dimethylformamide not det.

Latest update: December 14, 2018

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