

Catalog # 10-2548 Phosphoramidon

CAS# 119942-99-3

N-(α-Rhamnopyranosyloxyhydroxyphosphinyl)-L-leucyl-L-tryptophan • 2Na Lot # X101327

Inhibits neutral endopeptidase 24.11 (NEP; Neprilysin; EC 3.4.24.11), K=2 nM.¹ Also inhibits neprilysin 2 (K=2 nM).² Also inhibits endothelin-converting enzyme (IC₅₀ = 0.68 μ M).³ Induces a dramatic increase in amyloid-beta levels in rodents.⁴

- 1) Stephenson and Kenny et al. (1987), The hydrolysis of alpha-human atrial natriuretic peptide by pig kidney microvillar membranes is initiated by endopeptidase-24.11.; Biochem. J., **243** 183.
- 2) Rose et al. (2002), Cell-specific activity of neprilysin 2 isoforms and enzymic specificity compared with neprilysin; Biochem. J., **363** 697
- 3) Ahn et al. (1998), Soluble human endothelin-converting enzyme-1: expression, purification, and demonstration of pronounced pH sensitivity; Arch. Biochem. Biophys.., **359** 258
- 4) Marr and Hafez (2014), *Amyloid-beta and Alzheimer's disease: the role of neprilysin-2 in amyloid-beta clearance;* Front. Aging Neurosci., **6** 187

PHYSICAL DATA

Molecular Weight: 587.47

Molecular Formula: $C_{23}H_{32}N_3O_{10}P \cdot 2Na$ Purity: >97% by TLC

NMR: Conforms

Solubility: DMSO (>25 mg/ml), water (>25 mg/ml), Methanol

Physical Description: White solid

Storage and Stability: Store as supplied at -20°C for up to 2 years from the date of purchase.

Solutions in DMSO or water may be stored at -20°C for up to 2 months.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.