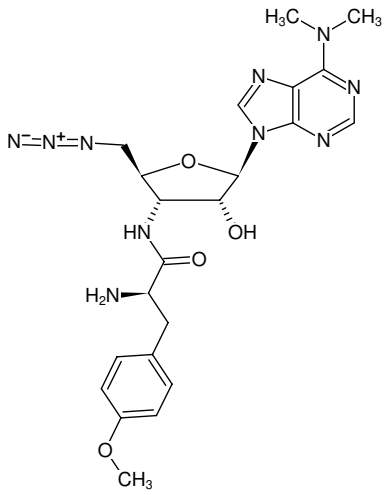
DATA SHEET

Jena Bioscience

5'-Azido-puromycin

Acetate salt

Cat. No.	Amount
CLK-110-L	10 x 0,5 mg (10 µmol)
CLK-110-S	0,5 mg (1 µmol)



Structural formula of 5'-Azido-puromycin

For research use only.

Shipping: shipped on gel packs

Storage Conditions: store at -20 °C

Short term exposure (up to 1 week cumulative) to ambient temperature possible.

Shelf Life: 12 months after date of delivery

Molecular Formula: $C_{22}H_{28}N_{10}O_4$ (free amine)

Molecular Weight: 496.53 g/mol (free amine)

Exact Mass: 496.23 g/mol (free amine)

Purity: ≥ 95 % (HPLC)

Form: solid

Color: colorless

Solubility: DMSO, PBS (up to 50 mM tested) pH adjusted to 5.0

Spectroscopic Properties: λ 268 nm, ε 19.5 L $mmol^{-1}$ cm^{-1} (0.1 M HCl)

Description:
Gee *et al.*[1] reported a non-radioactive alternative to analyze newly synthesized proteins in cell culture that is based on 5'-Azido-puromycin, an azide analog of puromycin.

5'-Azido-puromycin is cell-permeable and incorporates into the C-terminus of translating polypeptide chains thereby stopping translation.

The resulting truncated C-terminal azide-labeled proteins can subsequently be detected *via* copper-free click chemistry that offers the choice to introduce a Biotin group (*via* DBCO-modified Biotin) for subsequent purification tasks or a fluorescent group (*via* DBCO-modified fluorescent dyes) for subsequent microscopic imaging.

Selected References:
Gee *et al.* (2016) Puromycin Analogues Capable of Multiplexed Imaging and Profiling of Protein Synthesis and Dynamics in Live Cells and Neurons. *Angew. Chem. Int.Ed.***55**: 4933.