

Drosocin
Synthetic Peptide
Catalog # SP2242a**Specification**

Drosocin - Product Information

Primary Accession	P36193
Other Accession	Q6XMH8
Sequence	NH2-GKPRPYSPRPTSHPRPIRV-COOH

Drosocin - Additional Information**Gene ID** 36635**Other Names**

Drosocin, Dro

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Drosocin - Protein Information**Name** Dro**Function**

[Drosocin]: Antibacterial peptide with strong anti-Gram- negative bacteria activity (PubMed:8325867). Significantly contributes to antibacterial activity against Enterobacter cloacae but not Providencia burhodogranariae (PubMed:35730150). Inhibitor of bacterial translation machinery that targets translation termination in a prfA- or prfB-dependent manner (PubMed:36997646). Binds within the nascent peptide exit tunnel of the bacterial large ribosomal subunit, potentially interfering with nascent chain translocation that occurs post-peptide bond formation (PubMed:36997646, PubMed:36997647). Binds prfA/RF1 (and potentially prfB/RF2), trapping it on the ribosome after release of the nascent polypeptide chain and preventing further translation (PubMed:36997646). The resulting depletion of peptide chain release factors further disrupts bacterial translation by preventing ribosomal peptide chain release and inducing stop codon readthrough (PubMed:36997647). Entry into target Escherichia coli cells requires the bacterial peptide antibiotic transporter sbmA (PubMed:36997646).

Cellular Location

[Drosocin]: Secreted

Tissue Location

Constitutively expressed in the calyx and oviduct of the genital tract of fertilised egg-laying females, but not virgin females (PubMed:8944755). Not expressed in male genital tract (PubMed:8944755). Inducibly expressed in the fat body (PubMed:8944755) [Buletin]: Hemolymph (at protein level).

Drosocin - Images