

<b>Product Name:</b>	Clindamycin Phosphate
<b>Product Number:</b>	C036
<b>CAS Number:</b>	24729-96-2
<b>Molecular Formula:</b>	$C_{18}H_{34}ClN_2O_8PS$
<b>Molecular Weight:</b>	504.96
<b>Form:</b>	powder
<b>Appearance:</b>	White or almost white crystalline powder
<b>Solubility:</b>	freely soluble in aqueous solution.
<b>Source:</b>	Semi-synthetic
<b>Water Content (Karl Fischer):</b>	≤6.0%
<b>pH:</b>	3.5-4.5
<b>Storage Conditions:</b>	Store at room temperature in an airtight container
<b>Description:</b>	<p>Clindamycin Phosphate (clindamycin-2-phosphate) is a broad-spectrum antibiotic and antiparasitic agent. It is a semi-synthetic derivative of Lincomycin, a natural lincosamide from <i>Streptomyces lincolnensis</i>. Clindamycin Phosphate is freely soluble in water in aqueous solution.</p> <p>We also offer:</p> <ul style="list-style-type: none"><li>• Clindamycin (<a href="#">C233</a>)</li><li>• Clindamycin Hydrochloride (<a href="#">C035</a>)</li></ul>
<b>Mechanism of Action:</b>	Lincosamides inhibit bacterial protein synthesis by binding the 50S ribosomal subunit and interfering with tRNA activity during translation.
<b>Spectrum:</b>	Clindamycin is a broad spectrum antibiotic targeting primarily Gram-positive and Gram-negative bacteria such as <i>Clostridium</i> and <i>Bacteroides</i> species. It is also effective against protozoa.
<b>Microbiology Applications</b>	<p>Clindamycin is commonly used in clinical <i>in vitro</i> microbiological antimicrobial susceptibility tests (panels, discs, and MIC strips) against Gram-positive and Gram-negative anaerobes. Medical microbiologists use AST results to recommend antibiotic treatment options. Representative concentration ranges include:</p> <ul style="list-style-type: none"><li>• <i>Bacteroides fragilis</i> 0.25 µg/mL - 4 µg/ml</li><li>• <i>Clostridium difficile</i> 0.25 µg/mL - 32 µg/mL</li></ul> <p>For representative MIC data, <a href="#">click here</a>.</p>

**References:**

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Li LH, Kuentzel K L, Shugars KD and Bhuyan BK (1977) Cytotoxicity of several marketed antibiotics on mammalian cells in culture. *J. Antibiot (Tokyo)* 30(6):506-512 PMID 560364

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