



# Azithromycin impurity J, EvoPure<sup>®</sup> PRODUCT DATA SHEET

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<b>Product Name:</b>	Azithromycin impurity J, EvoPure <sup>®</sup>
<b>Product Number:</b>	A082
<b>CAS Number:</b>	117693-41-1
<b>Molecular Formula:</b>	C <sub>30</sub> H <sub>58</sub> N <sub>2</sub> O <sub>9</sub>
<b>Molecular Weight:</b>	590.8
<b>Form:</b>	Powder
<b>Storage Conditions:</b>	-20°C
<b>Description:</b>	Azithromycin impurity J, EvoPure <sup>®</sup> (Decladinosyl Azithromycin) is one of several impurities found in Azithromycin and can be used as a reference standard for impurity profiling.

TOKU-E carries the following Azithromycin derivatives:

- Azithromycin impurity J, EvoPure<sup>®</sup> (A082)
- Azithromycin Impurity E, EvoPure<sup>®</sup> (A074)
- Azithromycin Impurity F, EvoPure<sup>®</sup> (A075)
- Azithromycin Impurity G, EvoPure<sup>®</sup> (A083)
- Azithromycin Impurity H, EvoPure<sup>®</sup> (A084)
- Azithromycin Impurity I, EvoPure<sup>®</sup> (A081)
- Azithromycin impurity L, EvoPure<sup>®</sup> (A078)

<b>Mechanism of Action:</b>	Azithromycin inhibits bacterial growth by binding to the 70S ribosome (specifically the 50S subunit) preventing peptide bond formation and translocation during protein synthesis. Resistance is attributed to mutations in 50S rRNA preventing binding of Azithromycin and allowing the cell to synthesize error-free proteins.
<b>Technical Data:</b>	HPLC, NMR, FTIR, and MS analysis may be available. For more info, please email <a href="mailto:info@toku-e.com">info@toku-e.com</a> .

**References:**

Gladue RP, Bright GM, Isaacson RE, Newborg MF (1989) *In vitro* and *in vivo* uptake of Azithromycin (CP-62,993) by phagocytic cells: Possible mechanism of delivery and release at sites of infection. *Antimicrob. Agents Chemother.* 33(3):277-282 PMID 2543276

Lovmar, M and Tenson T (2003) The Mechanism of Action of Macrolides, Lincosamides and Streptogramin B Reveals the Nascent Peptide Exit Path in the Ribosome." *Journal of Molecular Microbiology* 330 (5):1005-1014. PMID 12860123

Wolf K and Malinverni R (1999) Effect of Azithromycin plus Rifampin versus that of Azithromycin alone on the eradication of *Chlamydia pneumoniae* from lung tissue in experimental pneumonitis. *Antimicrob. Agents Chemother.* 43(6):1491-1493. PMID 10348778

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