

PolySolve

Drug Release Media

Products for Drug Delivery Research

Now sold under the name PolyVitro, at our site polyvitro.com

Akina, Inc.

Business & Technology Center
1291 Cumberland Avenue
West Lafayette, IN 47906-1385
Phone: 765-464-0390 Fax: 765-464-0820

Akina Inc. is now selling high quality **Drug Release Media** for the HPLC analysis of drug eluting medical devices. This powder when dissolved in 1 L of HPLC grade water generates a media that can solubilize hydrophobic drugs. This media does not interfere with HPLC analysis allowing for rapid and accurate determination of kinetic release of drugs by typical HPLC analysis.

Catalogue Number	Product Name	Price
AKPOS01	PolySolve Drug Release Media (1 packet) (PBS + 0.06% PolySolve)	\$99.50
AKPOS02	Extra-Strength PolySolve Drug Release Media (1 packet) (PBS + 0.1% PolySolve)	\$129.50

The following graph shows the solubility profile of Everolimus in PolySolve media. Notice that even low concentrations of PolySolve have very high solubility for Everolimus. Regular Strength PolySolve has a solubility of 35 µg/ml Everolimus, which is sufficient for most applications. In situations where very high release concentrations are expected, use Extra-Strength PolySolve (Everolimus solubility of 50 µg/ml) to ensure sink conditions are maintained.

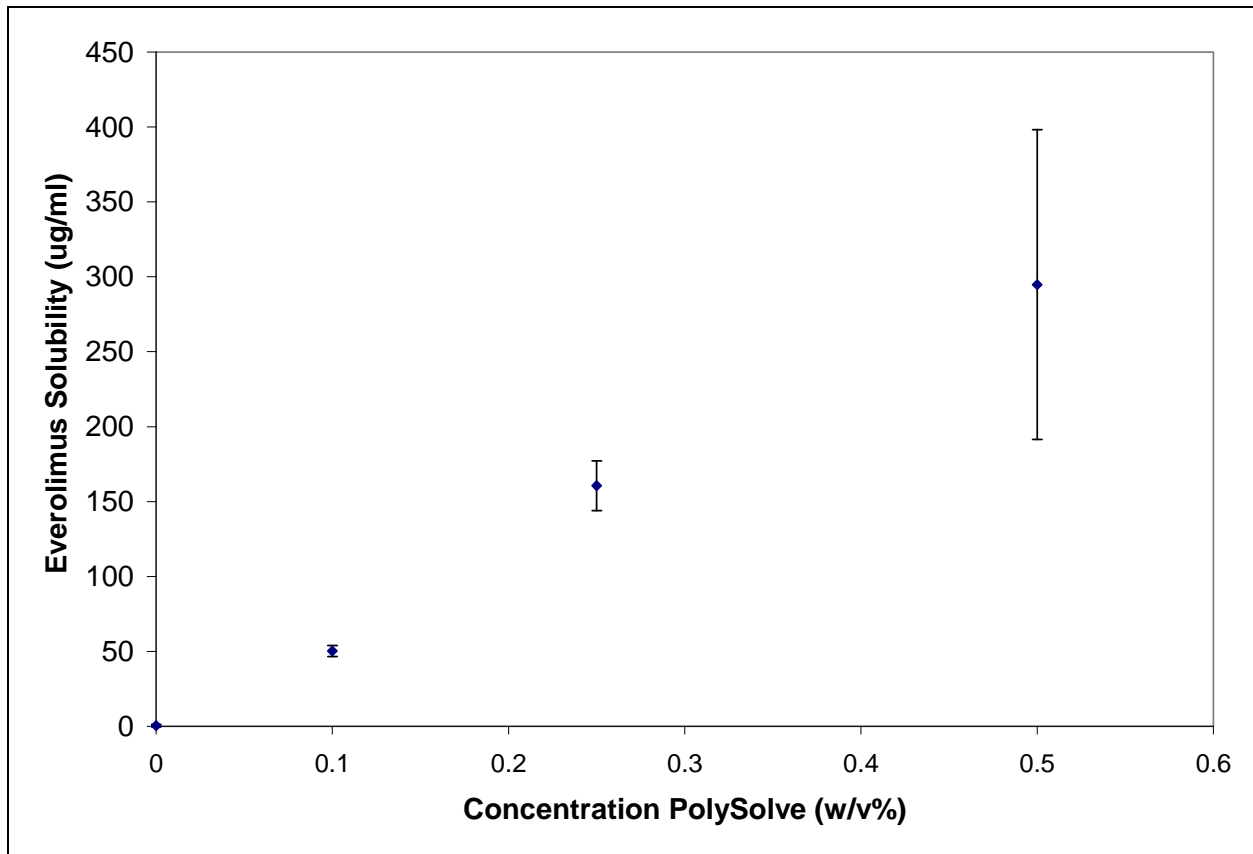


Figure 1. Everolimus solubility in PolySolve Media, Study performed in triplicate error bars are Confidence Level 95% (t-test)

Unlike hydrotropic agents, PolySolve does not generate interfering peaks, which hinder HPLC analysis. The chromatogram displayed below shows this.

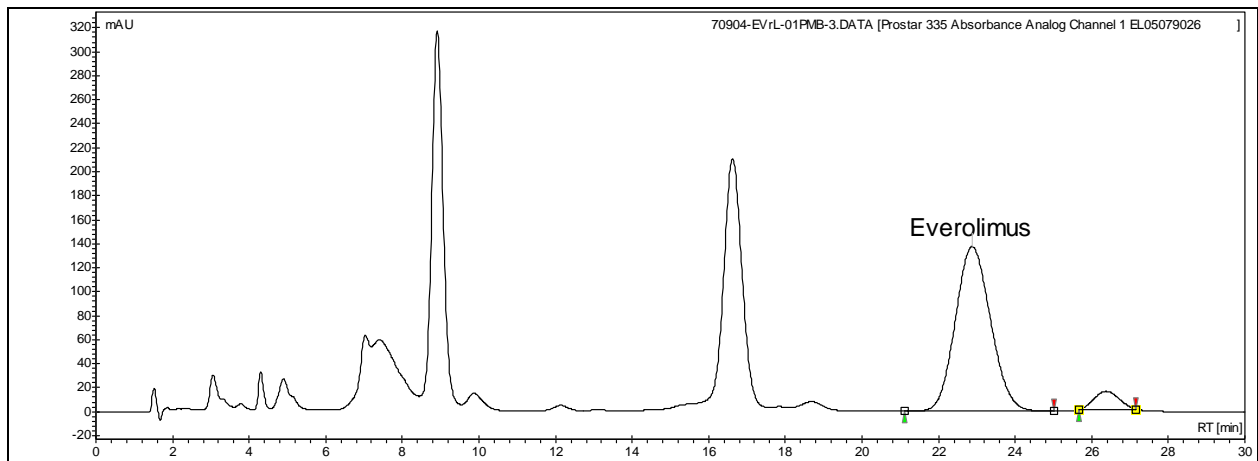


Figure 2. Typical HPLC chromatogram of Everolimus dissolved in PolySolve. Chromatogram collected on a heated (45°C) 5 um packed C18 column (3 x 150 mm) with a mobile phase of 60:40 Acetonitrile: 0.1% Formic Acid/Water flowing at 0.4 ml/min. U.V. Detection at 278 nm.

Directions for Use

Dissolve one packet of PolySolve into 1 liter of deionized HPLC grade water. Sterile filter through a 0.2 or 0.45 µm filter and handle aseptically. Use in place of traditional release media.