



## APPLICATION NOTE

E181VDJ-001

### Determination of Purity of an Aggregation Induced Emission (AIE) Fluorophore and its Derivatives for the Use as Anticancer Drug

#### ***Abstract***

Aggregation Induced Emission (AIE) Fluorophores represent a promising approach towards cancer theranostics. In the cited work, a mitochondria targeted AIE fluorophore was synthesized and tested regarding its anticancer effect. Purity determination of the AIE fluorophore and important derivatives was performed using the method described in this application note.

#### ***Keywords***

- Pharmacological products
- Anticancer Drugs
- Aggregation Induced Emission Fluorophores
- AIE

### **Compound information**

<b>Classification</b>	<b>Compound name</b>
AIE Fluorophore	

Please refer to Scheme 2 of the scientific publication (see References). The AIE is compound **1**, its derivatives are compounds **8** and **9**.

### **Chromatographic conditions**

Column	VDSpher® 100 C18-E
Particle Size, Length × inner diameter	5 µm, 250 × 4.6mm
<b>Order number</b>	<b>N2546E181VDJ</b>
Separation mode descriptions	analytical, reversed phase
Mobile Phase	A: Water (0.5 vol% TFA) A: Acetonitrile (0.5 vol% TFA)
Elution conditions	Gradient 0-15 min: 70% to 100% B 15-25 min: 100% B
Flow rate	1 ml/min
Injection	
Column temperature	
Pressure	
HPLC system	YL9100 Young Lin HPLC system Detection: UV, wavelength: 340 nm
Sample and sample preparation	

## **Chromatograms**

Please refer to Figure S11 of the Supplementary Information of the scientific publication (see References)

## **Origin**

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## **References**

“Mitochondria-Targeted Aggregation Induced Emission Theranostics: Crucial Importance of In Situ Activation”

Weon Sup Shin, Min Goo Lee, Peter Verwilt, Joung Hae Lee, Sung Gil Chi, Jong Seung Kim  
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