

## Product Datasheet

# Vazyme - Annexin V-PE/7-AAD Apoptosis Detection Kit (A213-01)

**Description**

Using phycoerythrin (PE) to label Annexin V. The labeled Annexin V retains a high affinity for PS and can be used as a probe to detect apoptosis by fluorescence microscopy or flow cytometry. Since PS eversion occurs in the early stage of apoptosis, Annexin V-PE staining can identify the occurrence of apoptosis in the early stage of apoptosis. 7-Aminoactinomycin D (7-AAD) is a nucleic acid dye and cannot penetrate the intact cell membrane of normal cells or early apoptotic cells. However, 7-AAD can penetrate membrane-damaged cells such as late apoptotic cells or necrotic cells, and bind to their DNA. It can be used to distinguish early apoptotic cells from late apoptotic cells or necrotic cells. Therefore, by co-staining Annexin V-PE with 7-AAD, cells in different apoptotic stages can be distinguished. On the scattergram of dual-color flow cytometry, Annexin V-PE and 7-AAD double negative are normal cells, Annexin V-PE positive and 7-AAD negative are early apoptotic cells, and Annexin V-PE and 7-AAD double positive cells are late apoptotic cells or necrotic cells.

**Storage**

Store at 2 ~ 8°C. Protect Annexin V-PE and 7-AAD staining solution from light and do not freeze. Adjust the shipping method according to the destination.

**Note**

For research use only

**Application notes**

Double label: Annexin V-PE and 7-AAD; distinguish cells at different stages of apoptosis (early / late apoptotic) Additional features: Red fluorescent label for easy co-labeling with other green fluorescents such as GFP High binding efficiency: Annexin V conjugates have higher binding efficiency and extremely accurate characterization of the apoptotic process

**Expiration Date**

12 months from date of receipt.

**Biorbyt Ltd.**

7 Signet Court, Swann's Road,  
Cambridge, CB5 8LA, United Kingdom  
Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)  
Phone: [+44 \(0\) 1223 859-353](tel:+44(0)1223859353) | Fax: [+1 \(415\) 651-8558](tel:+1(415)6518558)

**Biorbyt LLC.**

68 TW Alexander Drive,  
Durham, NC, 27713, United States  
Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)  
Phone: [+1 \(415\) 906-5211](tel:+1(415)9065211) | Fax: [+1 \(415\) 651-8558](tel:+1(415)6518558)



---

**Biorbyt Ltd.**

7 Signet Court, Swann's Road,  
Cambridge, CB5 8LA, United Kingdom

Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)

Phone: [+44 \(0\) 1223 859-353](tel:+44(0)1223859353) | Fax: [+1 \(415\) 651-8558](tel:+1(415)6518558)

**Biorbyt LLC.**

68 TW Alexander Drive,  
Durham, NC, 27713, United States

Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)

Phone: [+1 \(415\) 906-5211](tel:+1(415)9065211) | Fax: [+1 \(415\) 651-8558](tel:+1(415)6518558)