

# **Product Information**

# KinaseSTAR JNK Activity Assay Kit

### I. Kit Contents:

Components	K2079-40	Cap Color	Part Number
	40 assays		
Kinase Extraction Buffer	80 ml	NM	K2079-C-1
JNK Specific Antibody	80 µ1	Red	K2079-C-2
Protein A Sepharose	2 ml	Clear	K2079-C-3
c-Jun Protein/ATP Mixture	80 µl	Blue	K2079-C-4
Kinase Assay Buffer	25 ml	WM	K2079-C-5
Phospho-cJun Specific Antibody	50 µl	Green	K2079-C-6

#### **II. Introduction:**

c-Jun N-terminal kinase (JNK) is a member of the mitogen-activated protein (MAP) kinase family identified in mammals. Activation of JNK plays an critical role in neuronal apoptosis and other physiological and pathological processes.

The KinaseSTAR JNK Activity Assay Kit provides a specific and simple way for detection of JNK activity based on Western Blot method. The assay uses a JNK-specific antibody to immunoprecipitate JNK from cell or tissue lysates. The kinase reaction conducted to detect JNK activity is performed using recombinant c-Jun as substrate. The phosphorylation of c-Jun is analyzed by western blot method using a phospho-c-Jun specific antibody. The kit specifically detects JNK, without other kinase activity can be detected.

#### **III. General Consideration:**

Read the entire protocol before beginning the procedure.

### **IV. JNK Activity Immunoassay Protocol**

A. Preparation of Cell Lysate:

1. Activate cells by desired methods. Concurrently incubate a negative control culture without activation. To generate a positive control, cells can be treated with  $1 \mu g/ml$  of anisomycin for 1 hr, before being harvested.

- 2. Pellet cells (2 10 millions/assay) and wash once in 1X ice-cold PBS.
- 3. Lyse cells in 200 µl ice-cold JNK Extraction Buffer. Incubate on ice for 5 min.
- 4. Pellet at 13,000 rpm for 10 min at 4°C. Transfer supernatant (Cell Lysate) to a new tube.
- 5. Assay protein concentration of the Cell Lysate. The Cell Lysate can be used immediately or freeze at -80°C for future use.

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For research use only! Not to be used in humans.

## **Our promise**

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For more details, please visit <u>http://www.apexbt.com/</u> or contact our technical team.

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