

## New Products for Cell Signaling & Neuroscience

### NEUROTRANSMISSION (continued)

- P 6747 **Anti-P2Y<sub>1</sub> Purinergic Receptor** (rabbit)
- P 6497 **Anti-P2Y<sub>4</sub> Purinergic Receptor** (rabbit)
- P 6247 **Anti-P2Y<sub>10</sub> Purinergic Receptor** (rabbit)
- S 8194 **Salicylidene salicylhydrazide**  
Potent and selective  $\alpha 2\beta 1\gamma 1\delta$  GABA<sub>A</sub> receptor antagonist.
- S 0195 **Anti-5-HT<sub>4</sub> Serotonin Receptor** (rabbit)
- S 0445 **Anti-5-HT<sub>2B</sub> Serotonin Receptor** (rabbit)
- S 3445 **SM-19712**  
Potent, selective, nonpeptide endothelin converting enzyme (ECE) inhibitor.
- S 9819 **Anti-Smoothed Drosophila Homolog (SMOH)** (rabbit)
- S 0695 **Anti-Somatostatin Receptor Type 2**
- T 8949 **Telmisartan**  
Non-peptide AT<sub>1</sub> angiotensin receptor antagonist.
- U 4258 **UCM 17197**  
5-HT<sub>3</sub> Serotonin receptor antagonist.

### NITRIC OXIDE AND CELL STRESS

- A 6229 **Monoclonal Anti-AKR1 C3**, Clone NP6.G6.A6 (mouse)
- P 1247 **Anti-Peroxiredoxin 3 (PRDX3)** (rabbit)
- T 1075 **Anti-Tal (CS-15)** (rabbit)
- T 1200 **Anti-Tal (FQ-17)** (rabbit)

### PLANT BIOTECHNOLOGY

- M 8318 **Anti-AtMPK3 (*Arabidopsis thaliana* MPK3)** (rabbit)
- A 6979 **Anti-AtMPK4 (*Arabidopsis thaliana* MPK4)** (rabbit)
- A 7104 **Anti-AtMPK6 (*Arabidopsis thaliana* MPK6)** (rabbit)
- C 8115 **Coronatin**  
Antibiotic; polyketide phytotoxin produced by several members of the *Pseudomonas syringae* group of pathovars; known to induce hypertrophy and chlorosis; inhibits root elongation; stimulates ethylene production.

### PROTEIN PHOSPHORYLATION

- C 6115 **Anti-CIN85** (rabbit)
- D 9192 **4,5-Dimethoxy-6-nitrobenzaldehyde (DMNB)**  
DNA-dependent protein kinase (DNA-PK) inhibitor.
- J3020 **Anti-JAB1** (rabbit)
- N 2162 **NH125**  
Novel plant histidine kinase inhibitor and selective mammalian eukaryotic elongation factor-2 kinase (eEF-2K) inhibitor.
- P 5747 **Monoclonal Anti-Phosphoserine**, Clone PSR-45 (mouse)
- P 5872 **Monoclonal Anti-Phosphotyrosine**, Clone PT-66 (mouse)
- R 3028 **Anti-RALT/ MIG-6 (PE-16)** (rabbit)
- R 6028 **Anti-ROCK-1** (rabbit)
- R 8653 **Anti-ROCK-2** (rabbit)
- R 9153 **Anti-Rhodopsin** (rabbit)
- S 1195 **ST638**  
Protein tyrosine kinase inhibitor.
- T 8325 **TDZD-8**  
Selective glycogen synthase kinase-3 (GSK-3) inhibitor.
- T 2450 **Anti-TrkC** (goat)

## FAM-FLICA Caspase Detection Kits

- CS0280 Caspase 1 Fluorescein (FLICA) Assay (FAM-VAD-FMK)
- CS0290 Caspase 2 Fluorescein (FLICA) Assay (FAM-VDVAD-FMK)
- CS0300 Caspase 9 Fluorescein (FLICA) Assay (FAM-LEHD-FMK)
- CS0310 Caspase 10 Fluorescein (FLICA) Assay (FAM-AEVD-FMK)
- CS0320 Caspase 13 Fluorescein (FLICA) Assay (FAM-LEED-FMK)

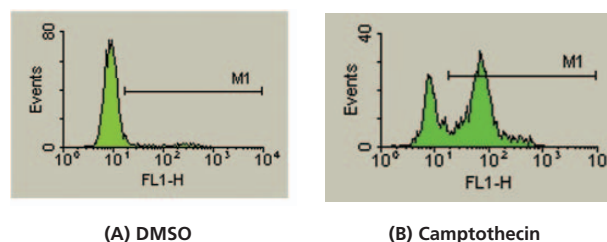
Caspase detection kits available from Sigma-RBI use Fluorochrome Inhibitor of Caspases (FLICA) reagent (FAM-XXXD-FMK), which consists of a fluorescent-labeled enzyme that is a potent inhibitor of caspases. FLICAs are cell permeable and non-cytotoxic. Inside the cell, the FLICA covalently binds to the active caspase heterodimer, inhibiting further enzymatic caspase activity. The FLICA covalently coupled to the enzyme is retained within the cell, while the unbound FLICA reagent diffuses out of the cell and is washed away. The remaining green fluorescent signal is a direct measure of the number of active caspase molecules present in the cell at the time the reagent was added.

- Detection:** Fluorometry, fluorescence microscopy, flow cytometry
- Species specificity:** Mammalian
- Size:** Sufficient for 100 tests

#### Features and Benefits:

- The reagent is cell permeable and non-cytotoxic
- Fluorescent signal detects active caspases
- Results quantitative by flow cytometry

### Flow Cytometry Detection of Caspase 1



#### Sample Results:

- Non-induced Jurkat cells were treated with DMSO (A) or induced with camptothecin for 3 hours (B)
- Cells were labeled with FAM-VAD-FMK for 1 hour and washed
- Caspase activity was detected using a flow cytometer
- Induced cells (B) show 2 peaks: caspase-negative cells occur to the left of the M1 region (unlabeled cells); caspase-positive cells lay within the M1 region (cells were labeled with FLICA).