

Cellular Activation of Signaling ELISA: CASE™ Kit for SRC Y418

<u>Catalog Number</u>	<u>Contents</u>
FE-011	One CASE Kit for 96 cell-based assays

Description

The CASE™ Kit for SRC is designed to analyze SRC phosphorylation in cultured human and mouse cell lines. This cell-based ELISA kit quantifies the amount of activated (phosphorylated) SRC protein relative to total SRC protein. The SRC phosphorylation site is tyrosine 418. By determining SRC protein phosphorylation in your experimental model system, you can verify SRC pathway activation in your cell line and determine the effect of various treatments, inhibitors, or activators on the pathway.

More information on SRC protein from NCBI:

The gene encoding SRC, a non-receptor tyrosine kinase, “is highly similar to the v-src gene of Rous sarcoma virus. This proto-oncogene may play a role in the regulation of embryonic development and cell growth. The protein ... is a tyrosine-protein kinase whose activity can be inhibited by phosphorylation by c-SRC kinase.” SRC can be activated by several growth factors, such as PDGF, M-CSF and G-CSF. The kinase activity of SRC is regulated by tyrosine phosphorylation at two sites with opposing effects. Phosphorylation of Tyr418 in the catalytic SH2 domain up-regulates enzyme activity. Phosphorylation of Tyr527 in the carboxyl-terminal tail by CSK negatively regulates its activity.

Reference: <http://www.ncbi.nlm.nih.gov/entrez/viewer.fcgi?db=nucleotide&val=38202215>

Materials Included

Please check the kit components immediately after you receive this package. SuperArray is not responsible for any missing items not reported within two (2) business days upon receipt.

Shelf Life: All reagents are stable at the recommended temperature for 6 months after receipt of the kit. Enough reagents are provided for 96 assays.

<u>Box 1: Assay and Detection Reagents</u> (Store at 4°C)	<u>Box 2: Primary Antibodies¹</u> (Store at -20°C)	<u>Dilution Factor</u>
Components	Components	
10X Antigen Retrieval Buffer ²	Anti-Phospho-Protein Specific Antibody	1:100
10X Washing Buffer ²	Anti-Pan-Protein Specific Antibody	1:100
Antibody Dilution Buffer		
Blocking Buffer, dry powder ³		
Cell Staining Solution		
Developing Solution		
Secondary Antibody ¹ (Dilute 1:16 before use.)		
Stop Solution		
Washing Buffer Reservoir (4)		

¹Each antibody stock must be freshly diluted by the appropriate factor into Antibody Dilution Buffer on the same day of the experiment. See the CASE™ Kit User Manual for more details.

²10X Washing Buffer and 10X Antigen Retrieval Buffer must be diluted to 1X with dH₂O before use.

³Just before use, dissolve powder in 30 ml 1X Washing Buffer by mixing well. Once dissolved, Blocking Buffer may be stored at 4 °C for up to two (2) weeks.

Shipping and Storage Conditions

Box 1 is shipped at either ambient or a refrigerated temperature and should be stored at 4°C.

Box 2 is shipped on dry ice or cold packs and should be stored at -20°C.

Related Products

Inhibitors for Functional Assays: Inhibitors of pathway activation that serve as a control for specificity.

For follow-up at the expression level:

RT² Profiler™ PCR Arrays and Oligo GEArray® Microarrays
(See www.superarray.com/ArrayList.php for complete listings)

RT² Real-Time™ PCR Primer Sets – available for every human, mouse, and rat gene
(See www.superarray.com/QRTsearch.php for our primer set search engine)

For knock down of gene expression:

SureSilencing™ shRNA Plasmids – available for every human, mouse, and rat gene
(See www.superarray.com/RNAisearch.php for complete listings)