

Cellular Activation of Signaling ELISA:

CASE™ Kit for p53 S37

<u>Catalog Number</u>	<u>Contents</u>
FE-016	One CASE Kit for 96 cell-based assays

Description

The CASE™ Kits for p53 are designed to analyze p53 phosphorylation in cultured human cell lines. These cell-based ELISA kits quantify the amount of activated (phosphorylated) p53 protein relative to total p53 protein. The phosphorylation site is serine 37. By determining p53 protein phosphorylation in your experimental model system, you can verify p53 pathway activation in your cell line and determine the effect of various treatments, inhibitors, or activators on the pathway.

More information on the p53 protein from NCBI:

“Tumor protein p53, a nuclear protein, plays an essential role in the regulation of cell cycle, specifically in the transition from G0 to G1. It is found in very low levels in normal cells; however, in a variety of transformed cell lines, it is expressed in high amounts, and believed to contribute to transformation and malignancy. p53 is a DNA-binding protein containing DNA-binding, oligomerization and transcription activation domains. It is postulated to bind as a tetramer to a p53-binding site and activate expression of downstream genes that inhibit growth and/or invasion, and thus function as a tumor suppressor. Mutants of p53 that frequently occur in a number of different human cancers fail to bind the consensus DNA binding site, and hence cause the loss of tumor suppressor activity. Alterations of the TP53 gene occur not only as somatic mutations in human malignancies, but also as germline mutations in some cancer-prone families with Li-Fraumeni syndrome.”

Reference: www.ncbi.nlm.nih.gov/entrez/query.fcgi?dopt=GenPept&cmd=Retrieve&db=protein&list_uids=8400738

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.

Box 1: Assay and Detection Reagents (Store at 4°C)	Box 2: Primary Antibodies¹ (Store at -20°C)	Dilution Factor
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)