

## Human Apoptosis Signaling Array (19 targets)

**Catalog Number:** AKAA021

**Size:** 2, 4, or 8

**Price:** [Online Inquiry](#)

| Product Information        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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| Product Name               | Human Apoptosis Signaling Array (19 targets)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Applications               | Multiplexed Protein Detection; Detection of Relative Protein Expression; Detecting Patterns of Cytokine Expression; Biomarker/ Key Factor Screening; Identifying Key Factors; Confirming a Biological Process                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Analytes                   | Akt (P-Ser473) (PKB (P-Ser473)) ATM (P-Ser1981) BAD (P-Ser112) Caspase-3 (Cleaved Asp175) Caspase-7 (Cleaved Asp198) CHK1 (P-Ser296) CHK2 (P-Thr68) eIF-2a (P-Ser52) ERK1 (P-T202/Y204)/ERK2 (P-Y185/Y187) HSP27 (P-Ser82) IKBa (P-Ser32) JNK (P-Thr183/Tyr185) NFKBP65 (P-Ser536) PARP1 (Cleaved Asp214/Gly215) p27 (P-Thr198) P53 (P-Ser15) SMAD2 (Ser245/250/255) TAK1 (P-Ser412)                                                                                                                                                                                                                                                                                                                                                                                                                   |
| ASSAY SIZE                 | 2 Arrays/4 Arrays/8 Arrays/                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Product Features           | Easy to useNo specialized equipment neededCompatible with nearly any liquid sampleProven technologyHighly sensitive (pg/ml)Sandwich ELISA specificityHigher density than ELISA, Western blot or bead-based multiplex                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Kit Components             | Human Apoptosis Signaling Antibody Array C1 MembranesBlocking BufferDetection Antibody Cocktail1,000X HRP-Anti-Rabbit IgG Concentrate20X Wash Buffer I Concentrate20X Wash Buffer II Concentrate2X Cell Lysis Buffer ConcentrateDetection Buffer CDetection Buffer D8-Well Incubation Tray w/ LidProtease Inhibitor Cocktail100x Phosphatase Inhibitor Cocktail IPhosphatase Inhibitor Cocktail IIPlastic SheetsArray Map TemplateOther Materials RequiredPipettors, pipet tips and other common lab consumablesOrbital shaker or oscillating rockerTissue Paper, blotting paper or chromatography paperAdhesive tape or Saran WrapDistilled or de-ionized waterA chemiluminescent blot documentation system , X-ray Film and a suitable film processor, or another chemiluminescent detection system. |
| Protocol Outline           | 1.Block membranes2.Incubate with Sample3.Incubate with Detection Antibody Cocktail4.Incubate with HRP-Conjugated anti-IgG5.Incubate with Detection Buffers6.Image with chemiluminescent imaging system7.Perform densitometry and analysis                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Species                    | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Number of Targets Detected | 19                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Gene Symbols               | AKT1, ATM, BAD, CASP3, CASP7, CHEK1, CHEK2, EIF2A, HSPB1, MAP3K7 MAPK1, MAPK3, MAPK8, NFKBIA, PARP1, PSMD9, RELA, SMAD2, TP53                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Compatible Sample          | Cell Culture Supernatants, Cell Lysates, Plasma, Serum, Tissue Lysates                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

## Product Information

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| Types                          |                                                                                                                                                                                                                                                                                                                   |
| Design Principle               | Sandwich-based                                                                                                                                                                                                                                                                                                    |
| Method of Detection            | Chemiluminescence                                                                                                                                                                                                                                                                                                 |
| Pathway                        | Akt Signaling / HIF-1 alpha Signaling / IGF Signaling / JAK/STAT Signaling / MAPK Signaling / mTOR Signaling / NFkB Signaling / p53 Signaling / PI3K-AKT Signaling / TGF-beta Signaling / Wnt/beta-Catenin Signaling                                                                                              |
| Quantitative/Semi-Quantitative | Semi-Quantitative                                                                                                                                                                                                                                                                                                 |
| Storage                        | For best results, store the entire kit frozen at -20&deg;C upon arrival. Stored frozen, the kit will be stable for at least 6 months which is the duration of the product warranty period. Once thawed, store array membranes at -20&deg;C and all other reagents undiluted at 4&deg;C for no more than 3 months. |