



## Human Actin Cytoskeleton Signaling Primer Library

**Catalog No:** HACS-1  
**Supplier:** RealTimePrimers  
**Lot No:** XXXXX  
**Supplied as:** solid  
**Stability:** store at -20°C

### Description

Contains 88 primer sets directed against human actin cytoskeleton signaling related genes and 8 housekeeping gene primer sets. Provided in a 96-well microplate (20 ul - 10 uM). Perform up to 100 PCR arrays (based on 20 ul assay volume per reaction). Just add cDNA template and SYBR green master mix.

### Gene List:

- ABI2 abl-interactor 2
- ACTG1 actin gamma 1
- ACTN1 actinin, alpha 1
- ARHGAP35 rho GTPase activating protein 35
- ARHGEF1 Rho guanine nucleotide exchange factor (GEF) 1
- ARHGEF4 Rho guanine nucleotide exchange factor (GEF) 4
- ARHGEF6 Rac/Cdc42 guanine nucleotide exchange factor (GEF) 6
- ARHGEF7 Rho guanine nucleotide exchange factor (GEF) 7
- ARPC5 actin related protein 2/3 complex, subunit 5, 16kDa
- BAIAP2 BAI1-associated protein 2
- BCAR1 breast cancer anti-estrogen resistance 1
- BRAF B-Raf proto-oncogene, serine/threonine kinase
- CD14 CD14 molecule
- CDC42 cell division cycle 42
- CFL1 cofilin 1 (non-muscle)
- CFL2 cofilin 2 (muscle)
- CHRM1 cholinergic receptor, muscarinic 1
- CHRM2 cholinergic receptor, muscarinic 2
- CHRM3 cholinergic receptor, muscarinic 3
- CHRM4 cholinergic receptor, muscarinic 4
- CRK v-crk avian sarcoma virus CT10 oncogene homolog
- CSK c-src tyrosine kinase
- CYFIP2 cytoplasmic FMR1 interacting protein 2
- DIAPH1 diaphanous homolog 1
- DIAPH2 diaphanous homolog 2
- DOCK1 dedicator of cytokinesis 1
- ENAH enabled homolog (Drosophila)
- F2 coagulation factor II (thrombin)
- F2R coagulation factor II (thrombin) receptor
- FGD1 FYVE, RhoGEF and PH domain containing 1
- FN1 fibronectin 1
- GIT1 G protein-coupled receptor kinase interacting ArfGAP 1
- GNA12 guanine nucleotide binding protein (G protein) alpha 12
- GNA13 guanine nucleotide binding protein (G protein), alpha 13
- GNG12 guanine nucleotide binding protein (G protein), gamma 12
- GSN gelsolin
- HRAS Harvey rat sarcoma viral oncogene homolog
- INS insulin
- IQGAP1 IQ motif containing GTPase activating protein 1
- ITGA1 integrin, alpha 1
- LIMK1 LIM domain kinase 1
- MAP2K1 mitogen-activated protein kinase kinase 1
- MAP2K2 mitogen-activated protein kinase kinase 2
- MAPK1 mitogen-activated protein kinase 1
- MAPK3 mitogen-activated protein kinase 3
- MAPK4 mitogen-activated protein kinase 4
- MAPK6 mitogen-activated protein kinase 6
- MOS v-mos Moloney murine sarcoma viral oncogene homolog
- MSN moesin
- MYL1 myosin, light chain 1, alkali; skeletal, fast
- MYL3 myosin, light chain 3, alkali; ventricular, skeletal, slow
- MYLK myosin light chain kinase
- NCKAP1 NCK-associated protein 1
- NRAS neuroblastoma RAS viral (v-ras) oncogene homolog
- PAK1 p21 protein (Cdc42/Rac)-activated kinase 1
- PAK2 p21 protein (Cdc42/Rac)-activated kinase 2



- PAK3 p21 protein (Cdc42/Rac)-activated kinase 3
- PAK4 p21 protein (Cdc42/Rac)-activated kinase 4
- PAK6 p21 protein (Cdc42/Rac)-activated kinase 6
- PAK7 p21 protein (Cdc42/Rac)-activated kinase 7
- PFN1 profilin 1
- PIP5K1A phosphatidylinositol-4-phosphate 5-kinase, type I, alpha
- PIP5K1B phosphatidylinositol-4-phosphate 5-kinase, type I, beta
- PIP5K1C phosphatidylinositol-4-phosphate 5-kinase, type I, gamma
- PIP5KL1 phosphatidylinositol-4-phosphate 5-kinase-like 1
- PPP1R12A protein phosphatase 1, regulatory subunit 12A
- PTK2 protein tyrosine kinase 2
- PXN paxillin
- RAC1 ras-related C3 botulinum toxin substrate 1 (rho family, small GTP binding protein Rac1)
- RAC2 ras-related C3 botulinum toxin substrate 2 (rho family, small GTP binding protein Rac2)
- RAC3 ras-related C3 botulinum toxin substrate 3 (rho family, small GTP binding protein Rac3)
- RAF1 Raf-1 proto-oncogene, serine/threonine kinase
- RDX radixin
- RHOA ras homolog family member A
- ROCK1 Rho-associated, coiled-coil containing protein kinase 1
- ROCK2 Rho-associated, coiled-coil containing protein kinase 2
- SLC9A1 solute carrier family 9, subfamily A (NHE1, cation proton antiporter 1), member 1
- SOS1 son of sevenless homolog 1
- SOS2 son of sevenless homolog 2
- SSH1 slingshot protein phosphatase 1
- SSH2 slingshot protein phosphatase 2
- SSH3 slingshot protein phosphatase 3
- TMSB4X thymosin beta 4, X-linked
- VAV1 vav 1 guanine nucleotide exchange factor
- VCL vinculin
- VIL1 villin 1
- WASF1 WAS protein family, member 1
- WASF2 WAS protein family, member 2
- ACTB Actin, beta
- B2M Beta-2-microglobulin
- GAPDH Glyceraldehyde-3-phosphate dehydrogenase
- GUSB Glucuronidase, beta
- HPRT1 Hypoxanthine phosphoribosyltransferase 1
- Pgk1 Phosphoglycerate kinase 1
- PPIA Peptidylprolyl isomerase A
- RPL13A Ribosomal protein L13a

#### Usage

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