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| **Abbreviation** | **Protein Name** | **Function** |
| **AKT3** | **AKT serine/threonine protein kinase family** | cell signaling in response to insulin and growth factors, involved in cell proliferation, differentiation, apoptosis, tumorigenesis, as well as glycogen synthesis and glucose uptake. |
| **ARFIP2** | **ADP-ribosylation factor interacting protein 2** | GTP binding protein of Ras superfamily involved in vesicular intracellular traffic |
| **BRSK2** | **BR serine/threonine kinase 2** | related to AMP activated protein kinase involved in energy homeostasis |
| **BTG1** | **B-cell translocation gene 1, anti-proliferative gene** | Immediate early gene, interacts with general transcription complex, transcription factors and modulates intracellular signal transduction cascades |
| **CHD9** | **Chromodomain-helicase-DNA-binding protein 9** | ATP dependent chromatin remodeling, interacting partner determines whether repressor/activator |
| **COPS7B** | **COP9 signalosome complex subunit 7b,** | related to 26S ribosome regulatory complex |
| **EPC1** | **Enhancer of polycomb homolog 1** | transcriptional repressor |
| **ERBB3** | **Receptor tyrosine-protein kinase erbB-3** | member of the epidermal growth factor receptor (EGFR) family of receptor tyrosine kinases, heterodimerization leads to cell proliferation |
| **FBXW7** | **F-box/WD repeat-containing protein 7** | F-box proteins constitute one of the four subunits of ubiquitin protein ligase complex called SCFs (SKP1-cullin-F-box), which function in phosphorylation-dependent ubiquitination |
| **IPO7** | **Importin-7** | prevents the activation of Ran's GTPase by RanGAP1 and inhibits nucleotide exchange on RanGTP, and also binds directly to nuclear pore complexes |
| **JARID2** | **Jumonji, AT rich interactive domain 2** | regulator of cell proliferation |
| **MECP2** | **Methyl CpG binding protein 2** | repressing/silencing other genes |
| **NDEL1** | **Nuclear distribution protein nudE-like 1** | binds strongly to [centrosomes](http://en.wikipedia.org/wiki/Centrosome) in [interphase](http://en.wikipedia.org/wiki/Interphase) and localized to [mitotic spindles](http://en.wikipedia.org/wiki/Mitotic_spindle) in early M phase. |
| **PDSS1** | **Decaprenyl-diphosphate synthase subunit 1** | an enzyme that elongates the prenyl side-chain of coenzyme Q, or ubiquinone, one of the key elements in the respiratory chain |
| **PTPN9** | **Tyrosine-protein phosphatase non-receptor type 9** | signaling molecule involved in cell growth, differentiation, mitotic cycle |
| **RBM15** | **Putative RNA-binding protein 15** | suppressor function |
| **RGS2** | **Regulator of G-protein signaling 2** | family member of G protein coupled receptor |
| **SIRT1** | **sirtuin (silent mating type information regulation 2 homolog) 1** | deacetylates proteins that contribute to cellular regulation (reaction to stressors, longevity) |
| **SLC2A1** | **Solute carrier family 2** | facilitated glucose transporter, member 1 or GLUT1 |
| **STK39** | **STE20/SPS1-related proline-alanine-rich protein kinase** | function in the cellular stress response pathway |
| **TLK2** | **Serine/threonine-protein kinase tousled-like 2** | nuclear serine/threonine kinases involved in the regulation of chromatin assembly |
| **TRIB2** | **Tribbles homolog 2** | regulates MAPK (mitogen activated protein kinases) signaling pathways |
| **TYRO3** | **Tyrosine-protein kinase receptor** | interacts with the PI3 kinases (phosphatidylinositide-3-kinase) signaling pathway and GAS6 (growth arrest specific 6) involved in cell proliferation |
| **WDTC1** | **WD and tetratricopeptide repeats 1** | highly conserved, regulate cellular functions, such as cell division, cell fate, transcription, transmembrane signalling |
| **ZFYVE9** | [**Zinc finger FYVE domain-containing protein 9**](http://en.wikipedia.org/wiki/Zinc_finger_FYVE_domain-containing_protein_9) | anchoring protein involved in TGF beta signaling, phosphorylating transcription factors |