

Rodriguez-Fernandez and Dell'Angelica
Supplementary Table 2

| Rank | Human Gene name | Chr. | Protein name (alternative name) | Summary of reported/proposed function ^a | Interacting BLOC-1 subunit | Reference (PMID) ^b |
|------|-----------------|------|---|--|----------------------------|-------------------------------|
| 1 | <i>RAB11A</i> | 15 | Rab11a | GTPase, Protein/membrane trafficking, endosomes | Dysbindin | 17043677 |
| 2 | <i>PLEKHG2</i> | 8 | Phafin 2 | Protein/membrane trafficking | Pallidin | 16189514 |
| 3 | <i>NBEA</i> | 13 | neurobeachin | Protein/membrane trafficking, post-Golgi/endosomes | Dysbindin | 17043677 |
| 4 | <i>EXOC7</i> | 17 | EXO70 (exocyst complex component 7) | Protein/membrane trafficking, exocytosis | Snapin | 17947242 |
| 5 | <i>SNAP23</i> | 15 | SNAP-23 | Protein/membrane trafficking, membrane fusion | Snapin | 12877659 |
| 6 | <i>CSNK1D</i> | 17 | casein kinase 1 delta (CK1delta) | Protein kinase, multiple functions | Snapin, Dysbindin | 17101137 |
| 7 | <i>SNAP25</i> | 20 | SNAP-25 | Protein/membrane trafficking, synaptic vesicle exocytosis | Snapin | 10195194 |
| 8 | <i>WASF2</i> | 1 | WAS protein family, member 2 | Cytoskeleton, actin binding | Dysbindin | AfCS |
| 9 | <i>EXOC8</i> | 1 | exocyst complex 84-kDa subunit | Protein/membrane trafficking, exocytosis | Pallidin | 16189514 |
| 10 | <i>ZFYVE20</i> | 3 | rabenosyn-5 | Protein/membrane trafficking, endosomes | Dysbindin | 17043677 |
| 11 | <i>EXOC4</i> | 7 | SEC8 protein (exocysts complex component 4) | Protein/membrane trafficking, exocytosis | Dysbindin | 17043677 |
| 12 | <i>STX12</i> | 1 | syntaxin 13 (syntaxin 12, syntaxin 14) | Protein/membrane trafficking, endosomes, fusion | Pallidin | 10610180 |
| 13 | <i>RANBP5</i> | 13 | Ran binding protein (Karyopherin beta 3) | Nucleocytoplasmic transport | Dysbindin | 17043677 |
| 14 | <i>HTATIP</i> | 11 | HIV-1 Tat interacting protein, 60kDa | Chromatin remodeling, transcription, DNA repair | Snapin | 16169070 |
| 15 | <i>MYST2</i> | 17 | MYST histone acetyltransferase 2 | Histone acetyltransferase, DNA replication | Snapin | 16169070 |
| 16 | <i>AATF</i> | 17 | apoptosis antagonizing transcription factor | Transcription factor | BLOS2 | 17552904 |
| 17 | <i>ARFIP2</i> | 11 | Arfaptin2 | Cytoskeleton regulation | Dysbindin | 16189514 |
| 18 | <i>RGS7</i> | 1 | regulator of G-protein signaling 7 | Signal transduction | Snapin | 12659861 |
| 19 | <i>FJ10204</i> | 8 | C8ORF32 (hypothetical protein LOC55093) | Cytoskeleton, actin binding | Pallidin | 16189514 |
| 20 | <i>MACF1</i> | 1 | microtubule-actin crosslinking factor 1 | Cytoskeleton regulation | Dysbindin | 17043677 |
| 21 | <i>DST</i> | 6 | Dystonin (MACF2) | Signal transduction | Dysbindin | 17043677 |
| 22 | <i>EPS8</i> | 12 | epidermal growth factor receptor substrate 8 | AAA-type ATPase | Pallidin | 16189514 |
| 23 | <i>RNF151</i> | 16 | RNF151 (ring finger protein 151) | Immunoproteasome regulator | Dysbindin | 17577571 |
| 24 | <i>C1orf190</i> | 1 | hypothetical protein LOC541468 | Estrogen responsive gene, regulation of transcription | Pallidin | 16189514 |
| 25 | <i>TOR1A</i> | 9 | torsinA | Translation | Snapin | 18167355 |
| 26 | <i>PSME3</i> | 17 | proteasome 3 (prosome, macropain) | Cytokine, cell proliferation, development | BLOS1 | 16169070 |
| 27 | <i>EBAG9</i> | 8 | RCAS1 | Histone binding, transcription factor | BLOS2 | 18329849 |
| 28 | <i>EEF1G</i> | 11 | Eukaryotic Elongation factor 1 gamma | Hepatocyte growth factor receptor | Snapin | 15546961 |
| 29 | <i>PTN</i> | 7 | pleiotrophin | Guanine deamination | Snapin | 16120643 |
| 30 | <i>BRD7</i> | 16 | bromodomain containing 7 | ATP binding, microtubule motor activity | Pallidin | 16189514 |
| 31 | <i>MET</i> | 7 | receptor tyrosine kinase MET (TRP) | Cell growth, communication and differentiation | Snapin | 16169070 |
| 32 | <i>GDA</i> | 9 | cypin | Renal tubular urea transporter | Snapin | 15635093 |
| 33 | <i>CII-116</i> | 12 | CCDC53 (coiled-coil domain containing 53) | Cell migration | Snapin | 16169070 |
| 34 | <i>KIF5C</i> | 2 | kinesin family member 5 | Cell surface binding and cell adhesion | Snapin | 16169070 |
| 35 | <i>DDR1</i> | 6 | discoidin domain receptor family, member 1 | Regulator of kinases involved in pro-inflammatory signal | Dysbindin | 17043677 |
| 36 | <i>KIAA0240</i> | 6 | hypothetical protein LOC23506 | Transcription factor | Snapin | 16169070 |
| 37 | <i>GPRASP1</i> | X | G protein-coupled receptor sorting 1 | Cell adhesion, differentiation, neurite outgrowth | Dysbindin | 16169070 |
| 38 | <i>SLC14A2</i> | 18 | urea transporter, member 2 | Ion channel, kinase | Snapin | 17702749 |
| 39 | <i>DGCR6L</i> | 22 | DiGeorge syndrome critical region gene 6 like | Plasma membrane stability, signaling | Dysbindin | 16189514 |
| 40 | <i>AGGF1</i> | 5 | angiogenic factor VG5Q | Cell cycle regulation | Pallidin | 16189514 |
| 41 | <i>IKBKAP</i> | 9 | IKAP | Receptor for capsaicin, transducer of pain stimulation | Snapin | 16169070 |
| 42 | <i>ZNF490</i> | 19 | zinc finger protein 490 | Cell cycle regulation | Dysbindin | 17043677 |
| 43 | <i>LAMC1</i> | 1 | laminin, gamma 1 | Cell surface binding and cell adhesion | Snapin | 17088214 |
| 44 | <i>TRPM7</i> | 15 | TRPM7 | Regulator of kinases involved in pro-inflammatory signal | Snapin | 16169070 |
| 45 | <i>DTNB</i> | 2 | beta-dystrobrevin | Transcription factor | Dysbindin | 11316798 |
| 46 | <i>CMY45</i> | 5 | myospryn cardiomyopathy associated 5 | Cell adhesion, differentiation, neurite outgrowth | Dysbindin | 14688250 |
| 47 | <i>CCND3</i> | 6 | cyclin D3 | Ion channel, kinase | Snapin | 16189514 |
| 48 | <i>TRPV1</i> | 17 | vanilloid receptor-1 (TRPV1) | Plasma membrane stability, signaling | Dysbindin | 15066994 |
| 49 | <i>CCNA2</i> | 4 | cyclinA2 | Cell cycle regulation | Dysbindin | 17043677 |
| 50 | <i>ADRA1A</i> | 8 | alpha-1A-adrenergic receptor | G-coupled receptor, regulation of growth and proliferation | Snapin | 17684020 |
| 51 | <i>DTNA</i> | 18 | alpha-dystrobrevin | Plasma membrane stability, signaling | Dysbindin | 11316798 |
| 52 | <i>CSF3R</i> | 1 | colony stimulating factor 3 receptor | Cytokine receptor | Snapin | 16595180 |
| 53 | <i>AKAP6</i> | 14 | A kinase anchor protein 6 (PRKA) | Binds the regulatory subunit of protein kinase A | Dysbindin | 17043677 |
| 54 | <i>HAP1</i> | 17 | huntingtin-associated protein 1 | Protein/membrane trafficking or organelle transport | Snapin | 16169070 |
| 55 | <i>RyR1</i> | 19 | ryanodine receptor type1 | Calcium release channel in sarcoplasmic reticulum | Snapin | 16723744 |

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Supplementary Table 2

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|----|-----------------|----|---|---|-----------|----------|
| 56 | <i>RyR2</i> | 1 | ryanodine receptor type 2 | Calcium channel in cardiac muscle | Snapin | 16723744 |
| 57 | <i>RyR3</i> | 15 | ryanodine receptor type 3 | Calcium release channel | Snapin | 16723744 |
| 58 | <i>IMMT</i> | 2 | IMMT (Mitoftilin) | Protein binding, mitochondria | Snapin | 16169070 |
| 59 | <i>C10ORF78</i> | 10 | hypothetical protein LOC119392 | | Dysbindin | 17043677 |
| 60 | <i>KIAA0408</i> | 6 | hypothetical protein LOC9729 | | Dysbindin | 17043677 |
| 61 | <i>ABI3</i> | 17 | NESH protein | Cell mobility | Dysbindin | 16189514 |
| 62 | <i>ESF1</i> | 20 | ABT1-associated protein | Regulation of transcription | Dysbindin | 17043677 |
| 63 | <i>HNF1A</i> | 12 | HNF1 homeobox A | Transcription factor | Snapin | 16330323 |
| 64 | <i>BRF1</i> | 14 | subunit of RNA polymerase III | Transcription factor | Dysbindin | 17043677 |
| 65 | <i>C18ORF24</i> | 18 | spindle and KT (kinetochore) associated 1 | Cell cycle | Pallidin | 16189514 |
| 66 | <i>SPAG5</i> | 17 | sperm associated antigen 5 | Mitotic spindle, cell cycle, mitosis | Snapin | 16169070 |
| 67 | <i>ADCY6</i> | 12 | adenylate cyclase 6 | cAMP catalysis | Snapin | 15319443 |
| 68 | <i>SYNE1</i> | 6 | nesprin (Synaptic nuclear envelope p1) | Localizes to nuclear membrane, spinocerebellar ataxia | Dysbindin | 17043677 |
| 69 | <i>TMEM27</i> | X | collectrin | Amino acid transport | Snapin | 16330323 |
| 70 | <i>KNTC2</i> | 18 | kinetochore associated 2 | Cell cycle | Pallidin | 16189514 |

Footnotes:

^a As reported on either GeneOntology or the Summary section of NCBI Entrez Gene

^b PMID, PubMed identification number: <http://www.ncbi.nlm.nih.gov/sites/entrez?db=pubmed>

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