Table: Domain association

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Gene Name | Protein ID | Name of Domain | Domain ID | Description | Location in Protein Sequence |
| ABCB1 | NP\_000918.2 | **ABC\_TM1F** | [PS50929](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS50929) | ABC transporter integral membrane type-1 fused domain | **52 – 357**  **712 - 1000** |
| **ABC\_TRANSPORTER\_2** | [PS50893](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS50893) | *ATP-binding cassette, ABC transporter-type domain* | **392 – 628**  **1035 - 1273** |
| **ABC\_TRANSPORTER\_1** | [PS00211](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS00211) | *ABC transporters family* | **531 – 545**  **1176 - 1190** |
| APC | NP\_000029.2 | **ARM\_REPEAT** | [PS50176](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS50176) | *Armadillo/plakoglobin ARM repeat* | **660 - 702** |
| BAX | NP\_004315.1 | **BH3** | [PS01259](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS01259) | *Apoptosis regulator, Bcl-2 family BH3 motif* | **59 - 73** |
| **BH1** | [PS01080](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS01080) | *Apoptosis regulator, Bcl-2 family BH1 motif* | **99 - 118** |
| **BH2** | [PS01258](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS01258) | *Apoptosis regulator, Bcl-2 family BH2 motif* | **151 - 162** |
| BMPR1A | NP\_004320.2 | **GS** | [PS51256](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS51256) | *GS domain* | **204 - 233** |
| **PROTEIN\_KINASE\_DOM** | [PS50011](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS50011) | *Protein kinase domain* | **234 - 525** |
| **PROTEIN\_KINASE\_ATP** | [PS00107](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS00107) | *Protein kinases ATP-binding region* | **240 - 261** |
| **PROTEIN\_KINASE\_ST** | [PS00108](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS00108) | *Serine/Threonine protein kinases active-site* | **358 - 370** |
| CASP3 | NP\_004337.2 | **CASPASE\_P20** | [PS50208](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS50208) | *Caspase family p20 domain* | **43 - 167** |
| **CASPASE\_P10** | [PS50207](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS50207) | *Caspase family p10 domain* | **183 - 277** |
| **CASPASE\_HIS** | [PS01121](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS01121) | *Caspase family histidine active site* | **108 - 122** |
| **CASPASE\_CYS** | [PS01122](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS01122) | *Caspase family cysteine active site* | **154 - 165** |
| CD44 | NP\_000601.3 | **LINK\_2** | [PS50963](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS50963) | *Link domain* | **32 - 120** |
| **LINK\_1** | [PS01241](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS01241) | *Link domain* | **53 – 97** |
| CDH1 | NP\_004351.1 | **CADHERIN\_2** | [PS50268](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS50268) | *Cadherins domain* | **180 – 262**  **263 – 375**  **376 – 486**  **487 - 595**  **594 - 702** |
| **CADHERIN\_1** | [PS00232](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS00232) | *Cadherin domain* | **250 – 260**  **363 – 373**  **583 - 593** |
| CDKN1B | NP\_004055.1 | No Hit | | | |
| CEACAM5 | NP\_004354.3 | **IG\_LIKE** | [PS50835](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS50835) | *Ig-like domain* | **145 – 232**  **240 - 315**  **323 – 410**  **418 – 495**  **501 - 588**  **593 - 675** |
| CTNNA1 | NP\_001894.2 | **VINCULIN\_1** | [PS00663](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS00663) | *Vinculin family talin-binding region* | **178 - 198** |
| CTNNB1 | NP\_001091679.1 | **ARM\_REPEAT** | [PS50176](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS50176) | *Armadillo/plakoglobin ARM repeat* | **151 – 191**  **193 – 236**  **235 – 277**  **277 – 319**  **319 – 362**  **400 – 442**  **442 – 484**  **489 – 532**  **594 - 636** |
| DCC | NP\_005206.2 | **IG\_LIKE** | [PS50835](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS50835) | *Ig-like domain* | **11 – 135**  **139 – 229**  **234 – 326**  **331 - 416** |
| **FN3** | [PS50853](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS50853) | *Fibronectin type-III domain* | **431 - 524**  **530 - 620**  **625 – 718**  **728 - 821**  **846 – 942**  **947 - 1044** |
| EPCAM | NP\_002345.2 | **THYROGLOBULIN\_1\_2** | [PS51162](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS51162) | *Thyroglobulin type-1 domain* | **63 - 135** |
| **THYROGLOBULIN\_1\_1** | [PS00484](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS00484) | *Thyroglobulin type-1 repeat* | **95 - 123** |
| KIT | NP\_000213.1 | **IG\_LIKE** | [PS50835](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS50835) | *Ig-like domain* | **212 - 308** |
| **PROTEIN\_KINASE\_DOM** | [PS50011](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS50011) | *Protein kinase domain* | **589 - 937** |
| **PROTEIN\_KINASE\_ATP** | [PS00107](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS00107) | *Protein kinases ATP-binding region* | **595 - 623** |
| **RECEPTOR\_TYR\_KIN\_III** | [PS00240](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS00240) | *Receptor tyrosine kinase class III* | **648 - 661** |
| **PROTEIN\_KINASE\_TYR** | [PS00109](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS00109) | *Tyrosine protein kinases specific active-site* | **788 - 800** |
| KITLG | NP\_000890.1 | No Hit | | | |
| KRAS | NP\_004976.2 | **RAS** | [PS51421](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS51421) | *small GTPase Ras family* | **1 - 188** |
| MALT1 | NP\_006776.1 | **IG\_LIKE** | [PS50835](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS50835) | *Ig-like domain* | **125 – 201**  **212 - 305** |
| **CASPASE\_P20** | [PS50208](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS50208) | *Caspase family p20 domain* | **341 - 419** |
| MET | NP\_000236.2 | **SEMA** | [PS51004](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS51004) | *Sema domain* | **27 - 515** |
| **PROTEIN\_KINASE\_DOM** | [PS50011](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS50011) | *Protein kinase domain* | **1078 - 1345** |
| **PROTEIN\_KINASE\_ATP** | [PS00107](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS00107) | *Protein kinases ATP-binding region* | **1084 - 1110** |
| **PROTEIN\_KINASE\_TYR** | [PS00109](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS00109) | *Tyrosine protein kinases specific active-site* | **1200 - 1212** |
| MGMT | NP\_002403.2 | **THIOL\_PROTEASE\_HIS** | [PS00639](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS00639) | *Eukaryotic thiol (cysteine) proteases histidine active site* | **58 - 68** |
| **MGMT** | [PS00374](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS00374) | *Methylated-DNA--protein-cysteine methyltransferase active site* | **174 - 180** |
| MMP2 | NP\_001121363.1 | **FN2\_2** | PS51092 | *Fibronectin type-II collagen-binding domain* | **178 – 226**  **236 – 284**  **294 - 342** |
| **HEMOPEXIN\_2** | PS51642 | *Hemopexin repeat* | **422 – 466**  **467 – 513**  **515 – 563**  **564 - 610** |
| **CYSTEINE\_SWITCH** | [PS00546](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS00546) | *Matrixins cysteine switch* | **50 - 57** |
| **FN2\_1** | [PS00023](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS00023) | *Fibronectin type-II collagen-binding domain* | **183 - 224**  **241 - 282**  **299 - 340** |
| **ZINC\_PROTEASE** | [PS00142](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS00142) | *Neutral zinc metallopeptidases, zinc-binding region* | **350 - 359** |
| **HEMOPEXIN** | [PS00024](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS00024) | *Hemopexin domain* | **556 - 571** |
| MSH2 | NP\_000242.1 | **DNA\_MISMATCH\_REPAIR\_2** | [PS00486](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS00486) | *DNA mismatch repair proteins mutS family* | **743 - 759** |
| MTHFR | NP\_005948.3 | No Hit | | | |
| MUC1 | NP\_001018016.1 | **SEA** | [PS50024](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS50024) | *SEA domain* | **44 - 157** |
| MYC | NP\_002458.2 | **BHLH** | [PS50888](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS50888) | *Myc-type, basic helix-loop-helix (bHLH) domain* | **369 - 421** |
| PCNA | NP\_002583.1 | **PCNA\_1** | [PS01251](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS01251) | *Proliferating cell nuclear antigen* | **34 - 57** |
| **PCNA\_2** | [PS00293](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS00293) | *Proliferating cell nuclear antigen* | **61 - 79** |
| PTEN | NP\_000305.3 | **PPASE\_TENSIN** | [PS51181](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS51181) | *Phosphatase tensin-type domain* | **14 - 185** |
| **C2\_TENSIN** | [PS51182](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS51182) | *C2 tensin-type domain* | **190 - 350** |
| **TYR\_PHOSPHATASE\_1** | [PS00383](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS00383) | *Tyrosine specific protein phosphatases active site* | **122 - 132** |
| PTGS2 | NP\_000954.1 | **EGF\_3** | [PS50026](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS50026) | *EGF-like domain* | **17 - 55** |
| **PEROXIDASE\_3** *superfamily* | [PS50292](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS50292) | *Animal heme peroxidase superfamily* | **97 - 598** |
| RUNX3 | NP\_001026850.1 | **RUNT** | [PS51062](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS51062) | *Runt domain* | **68 - 196** |
| SDHA | NP\_004159.2 | **FRD\_SDH\_FAD\_BINDING** | [PS00504](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS00504) | *Fumarate reductase / succinate dehydrogenase FAD-binding site* | **97 - 106** |
| SDHB | NP\_002991.2 | **2FE2S\_FER\_2** | [PS51085](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS51085) | *2Fe-2S ferredoxin-type iron-sulfur binding domain* | **40 - 133** |
| **4FE4S\_FER\_2** | [PS51379](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS51379) | *4Fe-4S ferredoxin-type iron-sulfur binding domain* | **176 - 206** |
| **2FE2S\_FER\_1** | [PS00197](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS00197) | *2Fe-2S ferredoxin-type iron-sulfur binding region* | **93 - 101** |
| **4FE4S\_FER\_1** | [PS00198](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS00198) | *4Fe-4S ferredoxin-type iron-sulfur binding region* | **186 - 197** |
| SDHD | NP\_002993.1 | No Hit | | | |
| SMAD4 | NP\_005350.1 | **MH1** | [PS51075](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS51075) | *MAD homology domain 1 (MH1)* | **18 - 142** |
| **MH2** | [PS51076](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS51076) | *MAD homology domain 2 (MH2)* | **323 - 552** |
| STK11 | NP\_000446.1 | **PROTEIN\_KINASE\_DOM** | [PS50011](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS50011) | *Protein kinase domain* | **49 - 309** |
| **PROTEIN\_KINASE\_ATP** | [PS00107](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS00107) | *Protein kinases ATP-binding region* | **55 - 78** |
| **PROTEIN\_KINASE\_ST** | [PS00108](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS00108) | *Serine/Threonine protein kinases active-site* | **172 - 184** |
| TNF | NP\_000585.2 | **TNF\_2** | [PS50049](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS50049) | *TNF family* | **89 - 233** |
| **TNF\_1** | [PS00251](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS00251) | *TNF family* | **124 - 140** |
| TP53 | NP\_000537.3 | **P53** | [PS00348](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS00348) | *p53 family* | **237 - 249** |
| VEGFA | NP\_001020537.2 | **PDGF\_2** | [PS50278](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS50278) | *Platelet-derived growth factor (PDGF) family* | **219 - 315** |
| **PDGF\_1** | [PS00249](https://prosite.expasy.org/cgi-bin/prosite/nicedoc.pl?PS00249) | *Platelet-derived growth factor (PDGF) family* | **255 - 267** |