A GENE14128 (Transcript 63620_1), 416 amino acids

Fig. S1

Versus Human Caspase 3: 45% Identity over 238 amino acids

```
14128 170 YKMDKTPRGVAVIINNKSFLPASGMHRYPRNGTDVDRDALDKVFQKLGFNTLVYNDQSVYEIQKIFKSLAARDYSKENALIVSILTHGEE 259
Casp3  37 YKMDYPEMGLCIIINNKNFHKSTGMT--SRSGTDVDAANLRETFRNLKYEVRNKNDLTREEIVELMRDVSKEDHSKRSSFVCVLLSHGEE 124
          **** .  *:.:*****.*  ::**   .*.*****   * :.*::* ::.   ** :  ** ::::.:: .*:**..:::  :*:****

14128 260 GILYATDGTIQIRDMMRWFKG---TNLVGKPKIFIFQACQGHEYMDGVDATDAPPADKRVQ-IPVEADFLYAYSTVPGYYSWRNSVNGSW 345
Casp3 125 GIIFGTNGPVDLKKITNFFRGDRCRSLTGKPKLFIIQACRGTELDCGIETDSGVDDDMACHKIPVEADFLYAYSTAPGYYSWRNSKDGSW 214
          **::.*:*.:::::.: .:*:*    .*.****:**:***:* *   *::: ..   *   : *************.********* :***

14128 346 FIQSIAEVFDKYAKTTDLLTMMTRVNALVAT-YQSRTNDPYSDRKKQIPSIVSMMRKDFYFYP  407
Casp3 215 FIQSLCAMLKQYADKLEFMHILTRVNRKVATEFESFSFDATFHAKKQIPCIVSMLTKELYFYH  277
          ****:. ::.:**.. ::: ::****  *** ::* : *.  . *****.****: *::***
```

Versus Human Caspase 7: 45% Identity over 238 amino acids

```
14128 170 YKMDKTPRGVAVIINNKSFLPASGMHRYPRNGTDVDRDALDKVFQKLGFNTLVYNDQSVYEIQKIFKSLAARDYSKENALIVSILTHGEE 259
Casp7  60 YNMNFEKLGKCIIINNKNFDKVTGMG--VRNGTDKDAEALFKCFRSLGFDVIVYNDCSCAKMQDLLKKASEEDHTNAACFACILLSHGEE 147
          *:*:    * .:*****.*  .:**    ***** * :** * *:.***:.:**** *  ::*.::*. : .*:::  .:   :*:****

14128 260 GILYATDGTIQIRDMMRWFKG---TNLVGKPKIFIFQACQGHEYMDGVDATDAPP----ADKRVQIPVEADFLYAYSTVPGYYSWRNSVN 342
Casp7 148 NVIYGKDGVTPIKDLTAHFRGDRCKTLLEKPKLFFIQACRGTELDDGIQADSGPINDTDANPRYKIPVEADFLFAYSTVPGYYSWRSPGR 237
          .::*..**.  *:*:   *:*   ..*: ***:*::***:* *  **::* ..*     *: * :********:************.. .

14128 343 GSWFIQSIAEVFDKYAKTTDLLTMMTRVNALVA-TYQSRTNDPYSDRKKQIPSIVSMMRKDFYFYP 407
Casp7 238 GSWFVQALCSILEEHGKDLEIMQILTRVNDRVARHFESQSDDPHFHEKKQIPCVVSMLTKELYFSQ 303
          ****:*::..::::::.*  ::: ::****  **  ::*:::**: ..*****.:***: *::**
```

Versus Human Caspase 9: 31% Identity over 239 amino acids

```
14128 170 YKMDKTPRGVAVIINNKSFLPASGMHRYPRNGTDVDRDALDKVFQKLGFNTLVYNDQSVYEIQKIFKSLAARDYSKENALIVSILTHGEE 259
Casp9 153 YILSMEPCGHCLIINNVNFCRESGLR--TRTGSNIDCEKLRRRFSSPHFMVEVKGDLTAKKMVLALLELAQQDHGALDCCVVVILSHGCQ 240
          * :.  * * .:**** .*   **::  .*.*:::* : * : *..  * . * .* :. ::   : .** :*:.  :. :* **:** :

14128 260 -------GILYATDGT-IQIRDMMRWFKGT---NLVGKPKIFIFQACQGHEYMDGVDATDAPPADKR----------------------- 315
Casp9 241 ASHLQFPGAVYGTDGCPVSVEKIVNIFNGTSCPSLGGKPKLFFIQACGGEQKDHGFEVASTSPEDESPGSNPEPDATPFQEGLRTFDQLD 330
                 * :*.***  :.:..::. *:**   .* ****:*::*** *.:  .*.:.:.:.* *:

14128 316 --VQIPVEADFLYAYSTVPGYYSWRNSVNGSWFIQSIAEVFDKYAKTTDLLTMMTRVNALVATYQSRTNDPYSDRKKQIPSIVSMMRKDF 403
Casp9 331 AISSLPTPSDIFVSYSTFPGFVSWRDPKSGSWYVETLDDIFEQWAHSEDLQSLLLRVANAVSVKG---------IYKQMPGCFNFLRKKL 411
             .:*. :*:: :***.**: ***:. .***::::: ::*:::*:: ** ::: **   *:.             **:*. ..::**.:

14128 404 YFYPE 408
Casp9 412 FFKTS 416
          :* ..
```

B GENE23203 (Transcript 106327_1), 425 amino acids

Fig. S1

Versus Human Caspase 3: 36% Identity over 262 amino acids

```
23203 161 YPMNRQPHGLCLIVNNATFEAESGLANRKGSHVDARNLQSLFLYLKYKVTVVENQRARVLKDTIMRFAKQDHSSYDSVIVCMLXHGLEGR 250
Casp3  37 YKMDYPEMGLCIIINNKNFHKSTGMTSRSGTDVDAANLRETFRNLKYEVRNKNDLTREEIVELMRDVSKEDHSKRSSFVCVLLSHGEEGI 126
          * *:    ***:*:** .*. .:*::.*.*:.*** **:. *  ***:*   ::   . : : :  .:*:***. .*.:  :* ** **

23203 251 IYGVDGGLVSINDLVSMFNGYNAKTLIGKPKLFFIQACRGGDFDRGITFERIDGLESSPLEEKPVEEVLEELYPSEEADSGFXAPQSLPS 340
Casp3 127 IFGTNG-PVDLKKITNFFRGDRCRSLTGKPKLFIIQACRGTELDCGIETD--SGVDDD-----------------------MACHKIPV 189
          *:*.:*  *.::.:..:*.* ..::* ******:****** ::* **  : .*::..                          * :.:*

23203 342 EADILIAYXTVPGFVSWRHSDKGSWFVQALVXVFRQHSVNEDVASMLIKINRKVALEFESS------DKKKQMPAPXIMLTRKVFFFP 422
Casp3 190 EADFLYAYSTAPGYYSWRNSKDGSWFIQSLCAMLKQYADKLEFMHILTRVNRKVATEFESFSFDATFHAKKQIPCIVSMLTKELYFYH 277
          ***:* ** *.**: ***:*..****:*:*  :::*:: : :.  :* ::***** ****       . ***:*.   ***::::*:
```

Versus Human Caspase 7: 36% Identity over 262 amino acids

```
23203 161 YPMNRQPHGLCLIVNNATFEAESGLANRKGSHVDARNLQSLFLYLKYKVTVVENQRARVLKDTIMRFAKQDHSSYDSVIVCMLXHGLEGR 250
Casp7  60 YNMNFEKLGKCIIINNKNFDKVTGMGVRNGTDKDAEALFKCFRSLGFDVIVYNDCSCAKMQDLLKKASEEDHTNAACFACILLSHGEENV 149
          * ** :  * *:*:** .*:  :*:. *:*:. **. * . *  * :.* * ::  .  ::* : : :::**:.  ..   :* ** *.

23203 251 IYGVDGGLVSINDLVSMFNGYNAKTLIGKPKLFFIQACRGGDFDRGITFERIDGLESSPLEEKPVEEVLEELYPSEEADSGFXAPQSLPS 340
Casp7 150 IYGKDG-VTPIKDLTAHFRGDRCKTLLEKPKLFFIQACRGTELDDGIQAD------SGPIN-----------------DTDANPRYKIPV 215
          *** ** :..*:**.: *.* ..***: ************ ::* **  :       *.*::                 *:. .  .:*

23203 341 EADILIAYXTVPGFVSWRHSDKGSWFVQALVXVFRQHSVNEDVASMLIKINRKVALEFESSD------KKKQMPAPXIMLTRKVFFFP 422
Casp7 216 EADFLFAYSTVPGYYSWRSPGRGSWFVQALCSILEEHGKDLEIMQILTRVNDRVARHFESQSDDPHFHEKKQIPCVVSMLTKELYFSQ 303
          ***:*:** ****: *** ..:********  ::.:*. : :: .:* ::* :** .***..      :***:*.   ***::::*
```

Versus Human Caspase 9: 37% Identity over 263 amino acids

```
23203 161 YPMNRQPHGLCLIVNNATFEAESGLANRKGSHVDARNLQSLFLYLKYKVTVVENQRARVLKDTIMRFAKQDHSSYDSVIVCMLXHG---- 246
Casp9 153 YILSMEPCGHCLIINNVNFCRESGLRTRTGSNIDCEKLRRRFSSPHFMVEVKGDLTAKKMVLALLELAQQDHGALDCCVVVILSHGCQAS 242
          * :. :* * ***:**..*  **** .*.**::*..:*:  *   :: * *  :  *: :  :::.:*:***.: *. :* :* **

23203 247 ---LEGRIYGVDGGLVSINDLVSMFNGYNAKTLIGKPKLFFIQACRGGDFDRGITFERIDGLESSPLEEKPVEEVLEELYPSEEADSGFX 333
Casp9 241 HLQFPGAVYGTDGCPVSVEKIVNIFNGTSCPSLGGKPKLFFIQACGGEQKDHGFEVASTSPEDESPGSNP--EPDATPFQEGLRTFDQLD 328
             : * :**.**  **::.:*.:*** .. :* *********** * : *:*: .   .  :.** .:   *     :  . .: . :

23203 334 APQSLPSEADILIAYXTVPGFVSWRHSDKGSWFVQALVXVFRQHSVNEDVASMLIKINRKVALEFESSDKKKQMPAPXIMLTRKVFFFPK 423
Casp9 329 AISSLPTPSDIFVSYSTFPGFVSWRDPKSGSWYVETLDDIFEQWAHSEDLQSLLLRVANAVSVKG----IYKQMPGCFNFLRKKLFFKTS 416
          * .***: :**:::* *.*******....***:*::*  :*.* : .**: *:*::: . *:::       ****.   :* :*:** ..
```

C GENE25497 (Transcript 54104_1), ≈ 436 amino acids

Fig. S1

Versus Human Caspase 3: 32% Identity over 247 amino acids

```
25497 235 YPSNKRPRGICLIFNNKTFNQDRSLHLPRRDGTEKDVENLKLLWEKLHFXVIVKPDLTAHEMYDTARDYSRLDHSNYDCFVCCILSHGVQ 324
Casp3  37 YKMDYPEMGLCIIINNKNFHKSTGMTS--RSGTDVDAANLRETFRNLKYEVRNKNDLTREEIVELMRDVSKEDHSKRSSFVCVLLSHGEE 124
          *  :    *:*:*:***.*::. .:    *.**: *. **:  :.:*:: *  * *** .*: :  ** *: ***: ..*** :**** :

25497 325 GGIYGSDGEIIELGQITSQFKGTACXSLANKPKLFFVQACRGTDFDPGVQADAVXNSDEEAMRHSAEPNEGHFLLGYATPPGYVSWRSTQ 414
Casp3 125 GIIFGTNG-PVDLKKITNFFRGDRCRSLTGKPKLFIIQACRGTELDCGIETDSG---VDDDMACHKIPVEADFLYAYSTAPGYYSWRNSK 210
          * *:*::*  ::* :**. *:*  * **:.*****::******::* *:::*:     :: *     * *..** .*:*.*** ***.::

25497 415 HGSWYISHLCDVFHTYCERFDIMSMMVMVNGKVSEAYTKKGYKQCPAPVSPVNCLDSQEEETKSLYK 481
Casp3 211 DGSWFIQSLCAMLKQYADKLEFMHILTRVNRKVATEFESFSFDATFHAKKQIPCIVSMLTKELYFYH 277
          .***:*. ** ::: *.::::: ::. ** **:  : . .:.    . . : *: *   :   :*:
```

Versus Human Caspase 7: 33% Identity over 249 amino acids

```
25497 235 YPSNKRPRGICLIFNNKTFNQDRSLHLPRRDGTEKDVENLKLLWEKLHFXVIVKPDLTAHEMYDTARDYSRLDHSNYDCFVCCILSHGVQ 324
Casp7  60 YNMNFEKLGKCIIINNKNFDKVTGMGV--RNGTDKDAEALFKCFRSLGFDVIVYNDCSCAKMQDLLKKASEEDHTNAACFACILLSHGEE 147
          *  * .  * *:*:***.*::  .: :   :**:**.* *   :..* * ***  * :. :* *  :. *. **:*  **.* :**** :

25497 325 GGIYGSDGEIIELGQITSQFKGTACXSLANKPKLFFVQACRGTDFDPGVQADAVXNSDEEAMRHSAEPNEGHFLLGYATPPGYVSWRSTQ 414
Casp7 148 NVIYGKDG-VTPIKDLTAHFRGDRCKTLLEKPKLFFIQACRGTELDDGIQADSGPINDTDANPRYKIPVEADFLFAYSTVPGYYSWRSPG 236
          . ***.** :  : ::*::*:*  * :* :******:******::* *:***:   .* :*  :   * *..**:.*:* *** ****.

25497 415 HGSWYISHLCDVFHTYCERFDIMSMMVMVNGKVSEAYTKKGYKQCPAPVSPVNCLDSQEEETKSLYKDP 483
Casp7 237 RGSWFVQALCSILEEHGKDLEIMQILTRVNDRVARHFESQSDDPHFHEKKQIPCVVS--MLTKELYFSQ 303
          :***::. **.::. : : ::**.::. **.:*:. : .:. .      . : *: *    **.** .
```

Versus Human Caspase 9: 37% Identity over 249 amino acids

```
25497 235 YPSNKRPRGICLIFNNKTFNQDRSLHLPRRDGTEKDVENLKLLWEKLHFXVIVKPDLTAHEMYDTARDYSRLDHSNYDCFVCCILSHGVQ 324
Casp9 153 YILSMEPCGHCLIINNVNFCRESGLRT--RTGSNIDCEKLRRRFSSPHFMVEVKGDLTAKKMVLALLELAQQDHGALDCCVVVILSHGCQ 240
          *  . .* * ***:** .* :: .*:   * *:: * *:*:  :.. ** * ** ****::*  :  : :: **.  ** *  ***** *

25497 325 G-------GIYGSDGEIIELGQITSQFKGTACXSLANKPKLFFVQACRGTDFDPGVQADAVXNSDEEAMRHSAEPNEGHFLLGYAT---- 403
Casp9 241 ASHLQFPGAVYGTDGCPVSVEKIVNIFNGTSCPSLGGKPKLFFIQACGGEQKDHGFEVAST-SPEDESPGSNPEPDATPFQEGLRTFDQL 329
          .       .:**:**  :.: :*.. *:**:* **..******:*** * : * *.:. :. ..::*:   ..**:   *  *  *

25497 404 --------P----------PGYVSWRSTQHGSWYISHLCDVFHTYCERFDIMSMMVMVNGKVSEAYTKKGYKQCPAPVSPVNCLDSQEEE 475
Casp9 330 DAISSLPTPSDIFVSYSTFPGFVSWRDPKSGSWYVETLDDIFEQWAHSEDLQSLLLRVANAVS---VKGIYKQMPG------CFNFLR-- 408
                  *          **:****..: ****:. * *:*. :..  *: *::: * . **   .*  *** *.      *::  .

25497 476 TKSLYKDP 483
Casp9 409 KKLFFKTS 416
          .* ::* .
```