**Thrombin**

Gecko thrombin

mRNA 929 bases

QDLLCGASLISDRWILTAAHCIFYPPWDKNFTADDLVVRIGKHNR

RIHEKTREKIALLDKIIIHPKYNWKENLDRDIALLRLRKPVPFSDYIQPVCLPTKETVQ

SLLLTGYKGRVTGWGNLFETWGSSTPALPTYLQLVNLPIVDRDTCKASTKIKITDNMFC

AGYSPEDSKRGDACEGDSGGPFVMKNPQDNRWYQVGIVSWGEGCDRDGKYGFYTHVFRL

KKWLKKTVEKHGN"

Human

Partial sequence

MARIRGLQLPGCLALAALCSLVHSQHVFLAPQQARSLLQRVRRAN

TFLEEVRKGNLERECVEETCSYEEAFEALESSTATDVFWAKYTACETARTPRDK

Mouse

QELLCGASLISDRWVLTAAHCILYPPWDKNFTENDLLVRIGKHSRTRYERNVEKISMLEKIYVHPRYNWRENLDRDIALLKLKKPVPFSDYIHPVCLPDKQTVTSLLRAGYKGRVTGWGNLRETWTTNINEIQPSVLQVVNLPIVERPVCKASTRIRITDNMFCAGFKVNDTKRGDACEGDSGGPFVMKSPFNNRWYQMGIVSWGEGCDRKGKYGFYTHVFRLKRWIQKVIDQFG

**Collagen**

Homo sapien

Length: 1008 bases

MPLGPVVPFSPGSPGLPFGPGYPGNPLSPFLPLRPSLPTPSLPSSPVSPRGPGFPIPPFGPGSPGSPFLPSGPVLPRSPGAPRAPPLPLGPEMPCSPISPGGPAGPAGPCAPLVPCSPSKPGWPGPPLLPLAPGGPLRPKPPFFPVSPGPPGTPSLPGTPMGPRSPVSPLGPLSWLSCPGLPGSPRIPTSPLSPFSPRGPLSPLLPGFPFSPEEPGNPLSPSSPSRPSSPISPTSPFSPGNPREPFTPLWPGQPWKP

**Luciferase**

Rhagophthalmus giganteus- beetle?

Base length: 1843

MPNEIVLHGAKPRDPLDLGTAGNQLFRALTQFSYLKEALIDAHTE

EVVSYADILENSCRLAVCFEKYGLRQNSVISVCSENNAIFFYPVIAALYMGIITATVND

NYTERELLDTLNISKPELVFCSKKAIKNMMALKKNVNFIKKVVVLDSREDMGEAESLTN

FMKHYSQPNIDVRNFKPHDFDAKEQVALIMSSSGTTGLPKGVVLTHRNLSVRFVHCKDP

LFGTRTVPSTSILSIVPFHHAFGMFTTLSYFIVGLRVILLKRFEEEFFLSTIEKYRIPT

IVLAPPVMVFLAKSPLVDQYDVSSIREVATGGAPVGTEVAVAVAKRLKINGILQGYGLT

ETCCAVLITPHDDVKTGSTGKVAPYVQAKIVDLTTGKSLGPNKRGELCFKSEIIMKGYF

NNQKATDEAIDKDGWLHSGDIGYYDDGGHFYVVDRLKELIKYKGYQVAPAELEWLLLQH

PSIKDAGVTGIPDEAAGELPAACIVLEEGHSLSELEVIDYIAERVSPTKRIRGGVVFVD

DIPKGATGKLIRSELRRMLSQKKSKL"

**Antibody- partial sequence**

Mouse

LFWIPASISDVVMTQTPLSLPVSLGDQASISCRSSQNLVHNNGNT YLYWFLQKSGQSPKLLIYRASIRFSGVPDRFSGSGSETDFTLKISRVEAEDLGVYFCFQ

GTHVPWTFGGGTKLEIK"

**Ricin**

Caster bean

Gene length- 2,344 bases

516 amino acids

MKPGGNTIVIWMYAVATWLCFGSTSGWSFTLEDNNIFPKQYPIIN

FTTAGATVQSYTNFIRAVRGRLTTGADVRHEIPVLPNRVGLPINQRFILVELSNHAELS

VTLALDVTNAYVVGYRAGNSAYFFHPDNQEDAEAITHLFTDVQNRYTFAFGGNYDRLEQ

LAGNLRENIELGNGPLEEAISALYYYSTGGTQLPTLARSFIICIQMISEAARFQYIEGE

MRTRIRYNRRSAPDPSVITLENSWGRLSTAIQESNQGAFASPIQLQRRNGSKFSVYDVS

ILIPIIALMVYRCAPPPSSQFSLLIRPVVPNFNADVCMDPEPIVRIVGRNGLCVDVRDG

RFHNGNAIQLWPCKSNTDANQLWTLKRDNTIRSNGKCLTTYGYSPGVYVMIYDCNTAAT

DATRWQIWDNGTIINPRSSLVLAATSGNSGTTLTVQTNIYAVSQGWLPTNNTQPFVTTI

VGLYGLCLQANSGQVWIEDCSSEKAEQQWALYADGSIRPQQNRDNCLTSDSNIRETVVILSCGPASSGQRWMFKNDGTILNLYSGLVLDVRASDPSLKQIILYPLHGDPNQIWLPL



**Nuclear Pore Complex**

Homo sapien

Base length 2778

MDRSGFGEISSPVIREAEVTRTARKQSAQKRVLLQASQDENFGNT TPRNQVIPRTPSSFRQPFTPTSRSLLRQPDISCILGTGGKSPRLTQSSGFFGNLSMVTN

LDDSNWAAAFSSQRSGLFTNTEPHSITEDVTISAVMLREDDPGEAASMSMFSDFLQSFL

KHSSSTVFDLVEEYENICGSQVNILSKIVSRATPGLQKFSKTASMLWLLQQEMVTWRLL

ASLYRDRIQSALEEESVFAVTAVNASEKTVVEALFQRDSLVRQSQLVVDWLESIAKDEI

GEFSDNIEFYAKSVYWENTLHTLKQRQLTSYVGSVRPLVTELDPDAPIRQKMPLDDLDR

EDEVRLLKYLFTLIRAGMTEEAQRLCKRCGQAWRAATLEGWKLYHDPNVNGGTELEPVE

GNPYRRIWKISCWRMAEDELFNRYERAIYAALSGNLKQLLPVCDTWEDTVWAYFRVMVD

SLVEQEIQTSVATLDETEELPREYLGANWTLEKVFEELQATDKKRVLEENQEHYHIVQK

FLILGDIDGLMDEFSKWLSKSRNNLPGHLLRFMTHLILFFRTLGLQTKEEVSIEVLKTY

IQLLIREKHTNLIAFYTCHLPQDLAVAQYALFLESVTEFEQRHHCLELAKEADLDVATI

TKTVVENIRKKDNGEFSHHDLAPALDTGTTEEDRLKIDVIDWLVFDPAQRAEALKQGNA

IMRKFLASKKHEAAKEVFVKIPQDSIAEIYNQCEEQGMESPLPAEDDNAIREHLCIRAY

LEAHETFNEWFKHMNSVPQKPALIPQPTFTEKVAHEHKEKKYEMDFGIWKGHLDALTAD

VKEKMYNVLLFVDGGWMVDVREDAKEDHERTHQMVLLRKLCLPMLCFLLHTILHSTGQY

QECLQLADMVSSERHKLYLVFSKEELRKLLQKLRESSLMLLDQGLDPLGYEIQL

**Hemoglobin**

Homo sapien- partial amino acid sequence

MVLSPADKTNVKAAWGKVGAHAGEYGAEALERMFLSFPTTKTYFP

HFDLSHGSAQVKGHGKKVADALTNAVAHVHDMPNALSALSDLHAHKLRVDPVNFKLLSH

CLLVTLAAHLPAEFTPAVHASLDKFLASVSTVLTSKYR

**Prions**

elk

Gene length- 2,447

Partial Amino Acid Sequence

MLAFKLVSTRFAQGLRFLGLPVNPGRRQRARLSVRAPSPPRPCTSSSARRLTRPSCQSLTAAEQRASSFSQRQVNNHVVL

***Insulin***

homo sapien

gene length in base pairs- 1430

Number of Amino Acids 51

***Keratin***

mouse

gene- 1,747 bases

Amino acid sequence-

MSRQSTITFHSGSRRGFSTASATTPTAGRSRFSSVSVARSSGNSG

GLGRISGIGSGFGSRSLYNLGGTRRVSIGGCAGSGFRGGFGGRTSSGFGGSSGFAYGGG

IGGGFGGPGFSVCPSGGIQEVTVNQSLLTPLNLQIDPTIQRVRKEEREQIKTLNNKFAS

FIDKVRFLEQQNKVLETKWNLLQEQGSRTVRQNLEPFFDTYVNDLRRQLDGITAERGRL

DAELRNMQEVVEDFKVRYEDEINKRAAAENEFVGLKKDVDSAYMNKVELEAKVDSLTDQ

INFYRMIYEAELSQMQNQVSDTSVVLSMDNNRSLDLDSIIAEVKAQYEDIANRSRAEAE

SWYQTKYEELQVTAGRHGDDLRNTKQEISEMNRMIQRLRSEIDAVKKQCSSLQTAISDA

EQRGELALKDARAKLMELEDALQKAKQDMARLLREYQELMNVKLALDAEREFPQ