encoded in mitochondrial genome
encoded in nuclear genome
An example of a resident ER protein

MFGTLLLLYCFFLATVPALAETGGERQLSPEKSEIWGPGLKADVVLPARYFYIQAVDTSGNKFTSSPGEEKVFQVKVASAPREEQFTRVGVQVLDRKDGSFIVRYRMYASYKNLKVEVKVFQOGQHVAKSPYILKGPVYHENCDCPLODAAWSLREMNCPETIAIQORDLAHFPAVDPEKIAVEIPKRFGQRQLCHYTLKDKNVKYIKTHGHEHVGFRIFMDAILLSLTRKVKMMPDVELFVNLGDWPLEKKSNSNISHPIFSWCGSTSDKDIVMPTYDLDTSVLETMRVSDLMMSVQANTGPPWESKNSTAVWRGRDSRKERLELVEKLSRKHPELIDAATFTNFIFFKHDENLYGPIVKHISFFDFFHKHYQINIDGTVAAYRLPYLLVGDSVVLKQDSIYYEHFYNELOPWKHYIPVKSNLSDLLLKEKLWAKHDHEEAAKKIKAQGEFARNNLMGDDIFCYYFKLFQOEYANLQVSEPQIREGMKRVEPQTEDDLFPCTCHRKKTKDEL
Human CFTR protein sequence

MQRSPLEKASVSKLFFSWTRPILRKGYRQRELSEDIYQIPSVDADSNLSEKLEREDWRELASKK
NPKLINALRCCFFWRFMYGIFLYLVEVTKAVQQPLLGRIIASYDPDNKEERSIAIYLIGLCLL
FIVRTLLLHPAIFGLHHIGHQMRIAMFSLYKTKLSSRVLKISIQGVSLSSLNSNLKDFEGL
ALAHFVWIAPLQVALLMGLIWEILLQASACFGCLGFVLALFAGLGRMMKYRDQRAGIKISERLV
ITSEMIENIQSVKAYCWEEMEKMIEQNLQTEKLTRLKAYVRYFNSSAFFSGFVFVFLSVPY
ALIKGIILRKLKFTTISFCIVLVRMAVTOFPWAVQTWYDSLGAINKIQDFQLQPQYKTYKTEYNLTIT
EVMENVTAFWEEFGELFEKAKQNNNNRRKTSNGDDSLFFSNFSSLGTPVNLKDIRKIERGQLLA
VAGSTGAGKTSLLMVIMGELEPSEGKIKHGGRISFSCQFSWIMPGTKEIIFGVSYDEYRYRSV
IKACQLEDISKFAEKDNIVLGGITGQRARISLARAVYKADLYLLDSPFGYLDFVLETEKE
IFESCVCMLANKTRILVSTMKMHLLKAKDILILHEGSSYFGTFSELQNLQPDSKMLGCDSF
DQFSAERRNSILTETLHRFSLEGAPSVWTQKQQFSTGFEGFKEKRNISLNPINSRISQIVQ
KTPLQMNGIEEDSDEPLERRLSSLVPDSEQGEAILPRISVISTGPTLOWRRQSVLNLMTHSVNQG
QNIHRKTASTRKVSLAPQANLTELIDSRRLSQETGELSEIEEEINEDLKECFFDDMESIPAVTT
WNTLYRITVHKSFLIFLWICLVLFAEAVASLVLWLGGNTPLQDGKGNSTHSRNSYAVIITST
SSYYFYIYVGVADTLLAMGGFRGRLVLHITLTVSKILHLHHKLSVQAPMSTNLTKAGGILNRF
FSKDIAILDDLPLTIQIQLLIVIGAIAVAVLQYPYIFVATPVIVAFIMLRAYFLQTSQQL
KQLESEGRSPIFTHLVTSLKGLWTLRAFGRQFPYETFIFHKALNHTANWFLYLSTLRWFQMIEM
IFVIFFIAVTFISILTTGEGEGRVGIILTLMNIMSTLQAWVSIDVSMRSVSRVFKFIDMP
TEGKPTKSTPKYNGQLSKVMIIESHVKKDIWPSGGQMTVKDLTAKYTEGNAILENISFSIS
PGQRVGLLLGRTGKSTLLSAFLRLLNTEGIEIQIDGVSWDSITLQQWRKAFGVPQKVFISSFCT
RKNLDPYEQWSQDEIWKAVDEQLRSVIEQFFGKLDVLFVGDCCVLSHGHKOFMLARSVLSKAK
ILLDDEPSAHLPVTYIQIIRRTLQKAFADCTVILCEHRIEAMLECQQQFLVIEENKVRQYDSIQKL
LNERLSFRQAIQPSDRVKLFPHRNSSHCKSKPQIAALKEETEEEVQDTRL
