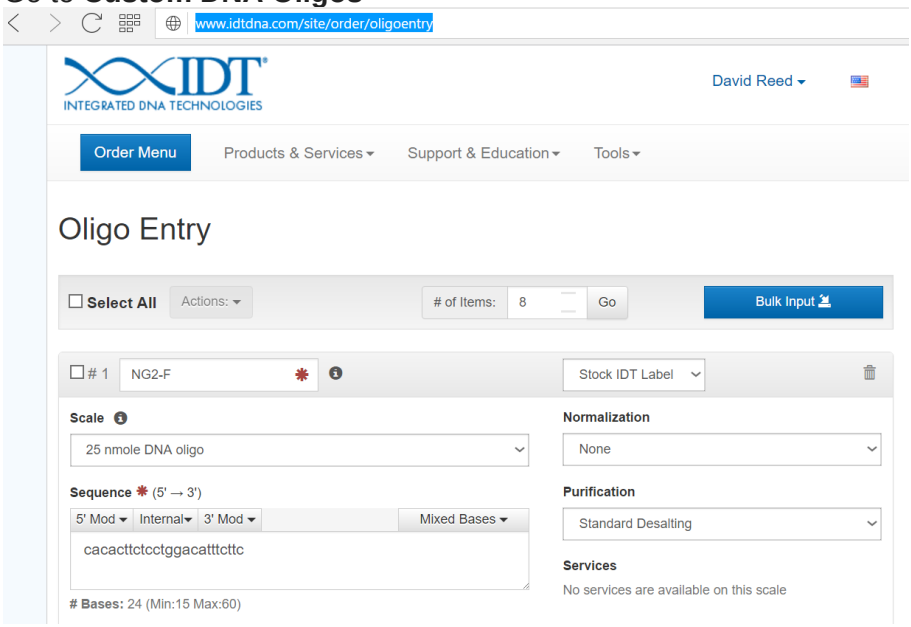
REED LABORATORY – PRIMER GUIDE
UIC College of Dentisry

Creating Primers:

Go to **www.idtdna.com/uic/**
Log in: CONTACT ME

Go to **Custom DNA Oligos**



PRIMER SEQUENCES:
5' to 3'

CONTROL:
*GAPDH [*F*: CCAGTATGACTCCACTCACG] [*R*: GACTCCACGACATACTCAGC]-m
GAPDH [F: TCACTGCCACCCAGAAGAC] [R: TGTAGGCCATGAGGTCCAC] - m

MATRIX:
*Col1a1 [*F*: ACGGCTGCACGAGTCACAC] [*R*: GGCAGGCGGGAGGTCTT] - m
*Col2a1 [*F*: CCTCTGCGACGACATAATCT] [*R*: CTCCTTTCTGTCCCTTTGGT] - m
*Col3a1 [*F*: GTTCTAGAGGATGGCTGTACTAAACACA] [*R*: TTGCCTTGCGTGTTTGATATTC] - m
*Col6a1_1 [*F:* GATGAGGGTGAAGTGGGAGA] [*R*: CAGCACGAAGAGGATGTCAA] -m
*Col6a1_2 [*F*: AGAACATAGCCTGGACG] [*R*: ACAACCCGCCTTAGAG] -m
*Col10 [*F*:CCCCATCCCATTTATGAGATTCTG] [*R*: GAGCCATACCTGGTCATTTTCTGTG] - m
*Acan [*F*: GAAGACGACATCACCATCCAG] [*R*: CTGTCTTTGTCACCCACACATG] - m
Col9a1 [F: ACCCTGGGTATCCGCAACT] [R: ACCCTGGTAAGTCATCTTGGC]

APOPTOSIS/STRESS
*Casp3 [*F*: GTCCCACTGTCTGTCTCAATGC] [*R*: TCAAGAAAGGAGCAGAGAGTAG]
*HtRA2 [*F*: ATCTCCTTTGCCATCCCTTC] [*R*: GGTCAGCATCATCACTCCAA] – m
XIAP [F:] [R:]

Caspase 7 [F:] [R:]
Syntenin-1 [F:] [R:]
Bag1 [F:] [R:]
GRP78 [F:] [R:]
Mupp1 [F:] [R:]

ENDOCYTOSIS:
Stonin1 [F:] [R:]

INFLAMMATION:
TNFa [F: CCCTCACACTCAGATCATCTTCT] [R: GCTACGACGTGGGCTACAG] - m
*NOS2 [F: TCACTGGGACAGCACAGAAT] [R: TGTGTCTGCAGATGTGCTGA] - m

PROTEASE:
*ADAM10 [*F*: TACAACCATGCCCAGCTTTTTAGT] [*R*: GCCGATGTGCCAGATGAGTG] - m
*MMP2 [*F*: CCAACTACGATGATGAC] [*R*: ACCAGTGTCAGTATCAG] - m
*MMP3 [*F*: TCCTGATGTTGGTGGCTTCAG] [*R*: TGTCTTGGCAAATCCGGTGTA] - m*
*MMP9 [*F*: ACCACATCGAACTTCGA] [*R*: CGACCATACAGATACTG] – m*
*MMP13 [*F*: TGATGGACCTTCTGGTCTTCTGG] [*R*: CATCCACATGGTTGGGAAGTTCT] - m
*MMP14 [*F*: GTGCCCTAGGCCTACATCCG] [*R*: TTGGGTATCCATCCATCACT] - m
HtRA1 [F:] [R:]
MMP1 [F:] [R:]

CHONDROGENESIS:
*TGFB [*F*: CACCTGCAAGACCATCGACAT] [*R*: GAGCCTTAGTTTGGACAGGATCTG] - m
*FGF-2 [*F*: TCCAGTTGGTATGTGGCACT] [*R*: CTTCTGTCCAGGTCCCGTTT] - m
*VEGFA [*F*: GGAGATCCTTCGAGGAGCACTT] [*R*: GGCGATTTAGCAGCAGATATAAGAA] - m
*IHH [*F*: AAACTCGTGCCTCTTGCCTA] [*R*: TGACAGAGATGGCCAGTGAG] - r
*PTHRP [*F*: CGCAGACGATGTCTTTACCA] [*R*: TCCACCCTTTGTCTGACTCC] - m
*OSX [*F*: GAAAGGAGGCACAAAGAAG] [*R*: CACCAAGGAGTAGGTGTGTT] - m
*BMP4 [*F*: TTCCTGGTAACCGAATGCTGA] [*R*: CCTGAATCTCGGCGACTTTTT] - m
*SOX9 [*F*: CATCAGCAGCACCGCACCCA] [*R*: CGGGTGATGGGCGGGTAGGA] - m
*RUNX2 [*F*: GAGGGCACAAGTTCTATCTG] [*R*: CGCTCCGGCCCACAAATCTC] - m
*PDGFr [*F*: AGGGGGCGTGATGACTAGC] [*R*: TTCCAGGAGTGATACCAGCTT] - m

CHONDROCYTE SIGNALLING:
*NG2_1 [F: GGTACCATGCTGCTTCGTAACA] [R: CCCCACGGTTGAAAGTACGT] - h
*NG2_2 [F: ACCCTCATCAGGAGACCCTC] [R: CAGGAGGTTGCCTCTTCTGG] - h
*NG2_3 [*F*: CACACTTCTCCTGGACATTTCTTC] [*R*: TGGCAGGTGGTGAGGACAGT] - m
*NG2_4 [*F*: AGAAGACCCGCAGGCTCAAG] [*R*: CGTGGAGTTGGAGGATGACG] - m
ERK [F:] [R:]
MAPK [F:] [R:]