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hemoglobin_subunit_delta
hemoglobin_subunit_beta
hemoglobin_subunit_beta
hemoglobin_subunit_gamma-2
hemoglobin_subunit_gamma-2
hemoglobin_subunit_gamma-1
hemoglobin_subunit_epsilon
hemoglobin_subunit_epsilon
hemoglobin_subunit_alpha
hemoglobin_subunit_talpha
hemoglobin_subunit_theta-1
hemoglobin_subunit_zeta
hemoglobin_subunit_zeta
hemoglobin_subunit_zeta
hemoglobin_subunit_zeta
hemoglobin_subunit_mu

cytoglobin
MEKVPGEMEIERRERSEE
SEAERKAVOAMWARLYANC@DVGVAI
myoglobin
merroglobin
MEKVPGEMEIERRERSEE
SEAERKAVOAMWARLYANC@DVGVAI
myoglobin
merroglobin
MEKVPGEMEIERRERSEE
NEAERKAVOAMWARLYANC@DVGVAI
myoglobin
MERPEPELIRQSWRAVSRSPLEHGTVL
                                                                                                                                                                                                                                                                                                                      28
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                                                                                                                                                                                                                                                                                                                      45
                                                                                                      LGRLLVVYPWIQRFESFG.DLSSPDAVMGNPKVKAHGKKVLGAF
LGRLLVVYPWIQRFESFG.DLSTPDAVMGNPKVKAHGKKVLGAF
LGRLLVVYPWIQRFEDSFG.NLSSASAIMGNPKVKAHGKKVLTSL
LGRLLVVYPWIQRFFDSFG.NLSSASAIMGNPKVKAHGKKVLTSL
LGRLLVVYPWIQRFFDSFG.NLSSPSAILGNPKVKAHGKKVLTSF
LERMFLSFPTTKTVFPHF.DLSH.GSAQVKGHGKKVADAL
LERTFLAFPAIKTVFSHL.DLSP...GSAQVKGHGKVADAL
LERLFLSHPQTKTVFPHF.DLHP...GSAQLRAHGKVVADAL
LERLFLYYPSIKVYPPHL.SACQ...DATQLLSHGQKVAAV
LVRFFVNFPSAKQYFSQFK.HMEDPLEMERSPQLRKHACRVMGAL
LIRLFKGHPETLEKFDKFK.HLKSEDEMKASEDLKKHGATVLTAL
FARLFALEPDLLPLFQVNCRQFSSPEDCLSSPEFLDHIRKVMLVI
hemoglobin_subunit_delta
                                                                                                                                                                                                                                                                                                                       72
hemoglobin_subunit_beta
                                                                                                                                                                                                                                                                                                                        72
hemoglobin_subunit_gamma-2
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hemoglobin_subunit_gamma-1
                                                                                                                                                                                                                                                                                                                       72
hemoglobin_subunit_epsilon
                                                                                                                                                                                                                                                                                                                       72
hemoglobin_subunit_alpha
hemoglobin_subunit_theta-1
                                                                                                                                                                                                                                                                                                                       67
hemoglobin_subunit_zeta
hemoglobin_subunit_mu
cytoglobin
                                                                                                                                                                                                                                                                                                                       89
myoglobin
                                                                                                                                                                                                                                                                                                                        73
                                                                                                                                                                                                                                                                                                                        72
neuroglobin
hemoglobin_subunit_delta
hemoglobin_subunit_beta
hemoglobin_subunit_gamma-2
hemoglobin_subunit_gamma-1
hemoglobin_subunit_epsilon
hemoglobin_subunit_alpha
hemoglobin_subunit_theta-1
hemoglobin_subunit_zeta
hemoglobin_subunit_zeta
hemoglobin_subunit_zeta
hemoglobin_subunit_mu
cytoglobin
myoglobin
myoglobin
myoglobin
neuroglobin
hemoglobin_subunit_mu
cytoglobin
myoglobin
hemoglobin_subunit_mu
cytoglobin
myoglobin
hemoglobin
hemoglobin_subunit_mu
cytoglobin
hemoglobin_subunit_wi
cytoglobin
hemoglobin_subunit_wi
cytoglobin
hemoglobin_subunit_wi
cytoglobin
hemoglobin_subunit_wi
cytoglobin
hemoglobin_subunit_wi
cytoglobin_subunit_wi
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cytoglobin_subunit_wi
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hemoglobin_subunit_wi
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cytoglobin
hemoglobin_subunit_wi
cytoglobin
hem
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                                                                                                                                                                                                                                                                                                                    134
                                                                                                                                                                                                                                                                                                                    115
                                                                                                      LARNFGKEFTPQMQAAYQKVVAGVANALAHKYH.
LAHHFGKEFTPPVQAAYQKVVAGVANALAHKYH.
LAIHFGKEFTPEVQASWQKMVTGVASALSSRYH.
LAIHFGKEFTPEVQAASWQKMVTGVASALSSRYH.
LATHEGKEFTPEVQAAWQKMVTAVASALSSRYH.
LAHLPAEFTPAVHASLDKFLASVSTVLTSKYR.
LAHLPAEFTPAVHASLDKFLASVSTVLTSKYR.
LARHYPGDFSPALQASLDKFLSHVISALVSEYR.
LARHYPGDFSPALQASLDKFLSHVISALVSEYR.
LASHLQDEFTVQMQAAWDKFLSVVSSVLTEKYR.
VAEEFASDFPETQRAWAKLRGLIYSHVTAAYKEVGWVQQVPNATLQSKHPGDFGADAQGAMNKALELFRKDMASNYKELGFQG.
LEKCLGPAFTPATRAAWSQLYGAVVQAMSRGWDGE.
hemoglobin_subunit_delta
                                                                                                                                                                                                                                                                                                                   147
hemoglobin_subunit_beta
                                                                                                                                                                                                                                                                                                                   147
hemoglobin_subunit_gamma-2
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hemoglobin_subunit_gamma-1
                                                                                                                                                                                                                                                                                                                   147
hemoglobin_subunit_epsilon
                                                                                                                                                                                                                                                                                                                    147
hemoglobin_subunit_alpha
                                                                                                                                                                                                                                                                                                                   142
hemoglobin_subunit_theta-1
                                                                                                                                                                                                                                                                                                                  142
hemoglobin_subunit_zeta
                                                                                                                                                                                                                                                                                                                   142
hemoglobin_subunit_mu
                                                                                                                                                                                                                                                                                                                  179
cytoglobin
myoglobin
                                                                                                                                                                                                                                                                                                                 154
                                                                                                                                                                                                                                                                                                                   151
neuroglobin
hemoglobin_subunit_delta .....hemoglobin_subunit_beta ....
                                                                                                                                                                  147
hemoglobin_subunit_gamma-2
hemoglobin_subunit_gamma-1 .....
hemoglobin_subunit_epsilon
hemoglobin_subunit_alpha
hemoglobin_subunit_theta-1
hemoglobin_subunit_zeta
hemoglobin_subunit_mu
                                                                                                       TPPATLPSSGP
cytoglobin
myoglobin
                                                                                                                                                                  154
neuroglobin
                                                                                                                 acidic (-)
                                                                                                        X aliphatic
                                                                                                                   aliphatic (small)
                                                                                                        X
X
X
                                                                                                                   amide
                                                                                                                    aromatic
                                                                                                                   basic (+)
                                                                                                                   hydroxyl
                                                                                                                     imino
                                                                                                                     sulfur
               Figure 1: Protein MSA with Chemical Similarity Highlighting
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