

# A5. WebLogo expression of the conserved sequence patterns in spider silks

Dooyup Jung

Pohang University of Science and Technology

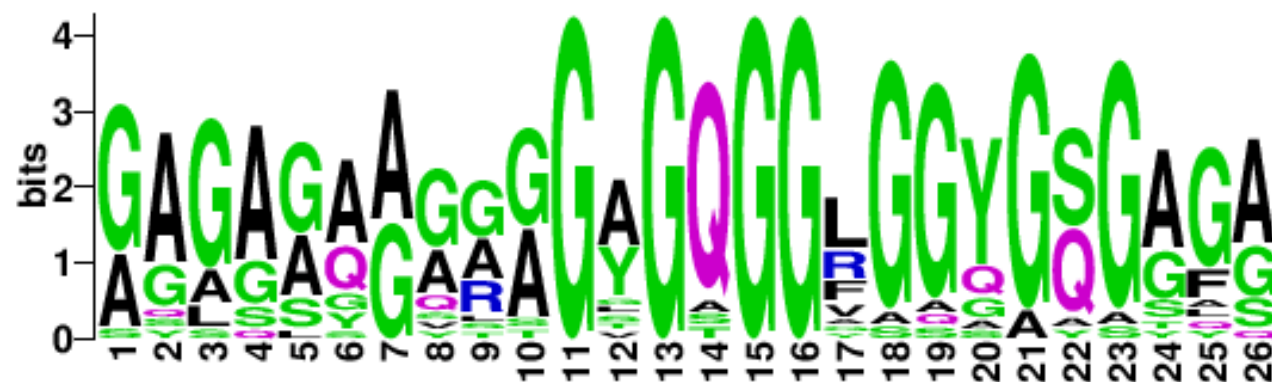
The **weblogo** created from 20 neighbouring amino acids of this motif is shown below



>gi|294440291|gb|ADE74592.1| major ampullate spidroin 1, partial [Peucetia viridans]

QGGFGGQGSAGAGAAAAAGAGAGQGGRGGYGQGGFGGQGSAGAGASAAAGAGAGQGGRGGYGQGGFGG  
QGSAGAGASAAAGAGAGQGGRGGYGQGGFGGQGSAGAGASAAAAAGAGQGGRGGYGQGGLGSGSGAG  
AGAGAAAAAAGAGGYGQGGLGGYGQAGAGQGGGLGGYSGAGAGASAAAAAGAGAGQGGGLGGYGQAG  
AGQGGGLGGYSGAGAGAAAAAAGAGGSGQGGGLGGYSGGGAGGASAAAAAGTGQGGVGGYGQAGSSAGA  
GTGGVGQGGYGSYSSYQSTSGISIALSTQSLGGQGQYQGLGAGASAGAGAAVGTGLGQGGGLGGYGQGS  
GSASAAASGSGSAIGGFGGYGQAGLGAGTAADV GATVSNTVSRLLSPAATSRVSSAVSSLVANGAPNLS  
SLPNVISSLSNSVSASTPGASGCEILVQVLMEVV TALVQILSSANVSSVNAGDPSQAAMTVGQSVAAAALG

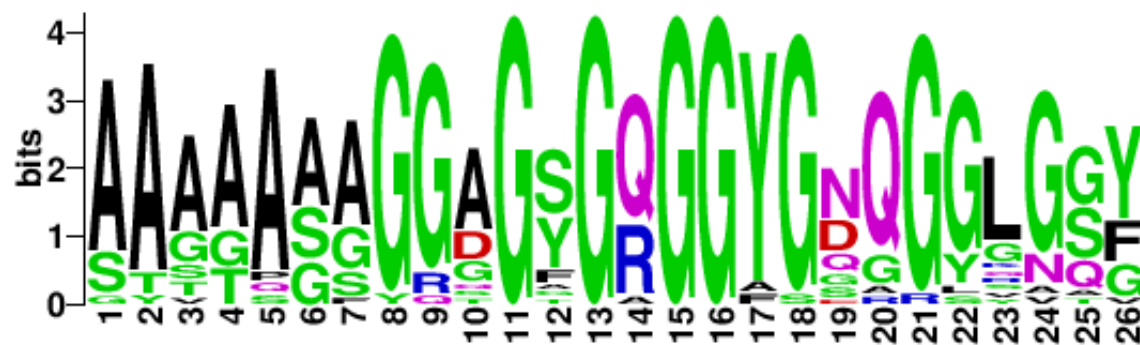
The **weblogo** created from 20 neighbouring amino acids of this motif is shown below



>gi|13561990|gb|AAK30598.1|AF350269\_1 fibroin 1, partial [Dolomedes tenebrosus]

GSQGRYGGQGSSGGYGQAGAGAATAATARADGSGQGRYDQSSQGGYGQAGAGATATAAAGGAGSGQ  
GGYGGQGGLGGYGQAGAGAAAAATAAGGAGSGQGDYGDQGGLGGYGQSGAGSATAPAAGGSFGQGGFG  
NRGKGAYGQSAGAGVGAAATAAAGGAGSGQGGYGDQGGLGGYGQAGAGAASAAAGGGDGYEQGGYGNQ  
GGLGSFGQAGAGAAAAASAGGAGSGRGGYGDQGGLGGYGQAGAGAASAAAGGGDGYGQYYGDQGGRG  
GYGQSGAGSATAAAAGGAGFGQGGYGQGGYGNQGGLGSFGQAGAGAAAAASAGGAGSGRGGYGDQGGL  
GGYGQAGAGAAAAAGGGDGYGQGGYGNQGGLGSFGQAGAGAAAAASAGGAGSGRGGYGGYGNQGG  
LGSFGQAGAGAAAAASAGGAGSGRGGYGDQGGLGGYGQAGSGAAAAAGGGDGYGQGGYGNQGGLGSF  
GQAGAGAAAAASAGGAGSGRGGYGGYGNQGGLGSFGQAGAGAAAAASAGGAGSGRGGYGDQGGLGG  
YQAGAGAGAASAAAGGGDGYGQGGYGNQRGVGSYQAGAGAAATSAAGGAGSGRGGYGEQGGLGGYGQ  
AGAGAASTAAGGGDGYGQGGYGNQGGRSYQSGAGAGAAVAAAAGGAVSGQGGYDGEQGGYGGYQSG  
AGAAVAAASGGTGAQGGYGSQGSQAGYQAGFRAAAATAAAGAGGAGGGQGGYGGQGGYGGGTGAGGA  
SSAGLSVTVGNMVSRLLSSPEAASRVSSAVSSLVSNQVNVNDALPSIISNLSSSISASATTASDCEVLVQV  
LLEVVSALVQIVCS

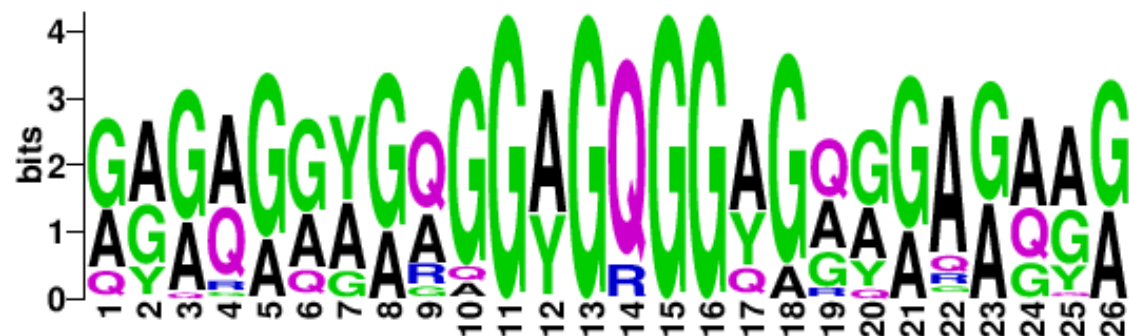
The [weblogo](#) created from 20 neighbouring amino acids of this motif is shown below





AAAGGAGQGGYGRGGAGQGGAAAAAAAAGSGQGGYGGQGAGQGGAGAAAAAAGAGQGGQGGYGRGG  
 YGQGGAGQGGAGAAAAAAGAGQGGQGGYGGYGGYGGYGGAGQGGAGAAAAAAGAGQGGYGR  
 GGAGQGGAAAAAGAGQGGYGGQGAGQGGAGAAAAAAGAGQGGQGGYGRGGYGGAGQGGAGAAAA  
 AAAGGAGQGGQGGYGGNGQGGAGQGGAAAAAAGAGQGGYGRGGAGQGGAAAAAAGAGQGGY  
 GQGAGQGGAGAAAAAAGAGQGGQGGYGRGGYGGAGQGGAGAAAAAAGGASQGGQGGYGGDYG  
 QGGAGQGGAAAAAAGAGQGGYGRGGAGQGGAAAAAGAGQGGYGGQGAGQGGAGAAAAAAGGAGRG  
 GQGGYGRGGYGGAGQGGAGAAAAAAGGAGQGGQGGYGGYGGAGQGGAGAAAAAAGGAGQGG  
 YGRGGAGQGGAAAAAGAGQGGYGGQGAGQGGAGAAAAAAGGAGRGQGGYGRGGYGGAGQGGAGAA  
 AAAAAAGGAGQGGQGGYGGYGGYGGAGQGGAAAAAAGVGGAGQGGYGRGGAGQGGAAAAAAGSG  
 QGGYGGQGAGQGGAGAAAAAAGAGQGGQGGYGGGGYGGAGQGGAGAAAAAAGAGQGGQGGY  
 QGGYGGAGQGGAGAAAAAAGAGQGGYGRGGAGQGGAAAATGAGQGGYGGQGAGQGGAGAAAAA  
 GGAGQGGQGGYGRGGYGGAGQGGAGAAAAAAGGAGQGGQGGYGGYGGAGQGGAGAAAAAAGG  
 AGQGGYGRGGAGQGGAAAAAAGAGQGGYGGQGAGQGGAGAAAAAAGGAGQGGQGGYGRGGYGG  
 AGQGGAGAAAAGGAGQGGQGGYGGYGGAGQGGAAAAAAGGAGQGGYGGYGGQGGAGAAAAA  
 SGPGQIYYGPQSVAAAPAAAAASALAAPATSARISSHASALLSNGPTNPASISNVISNAVSQISSNPGAS  
 ACDVLVQALLELVLTALLTIIGSSNIGSVNYDSSGQYAQVVTQSVQNAFA

The [weblogo](#) created from 20 neighbouring amino acids of this motif is shown below

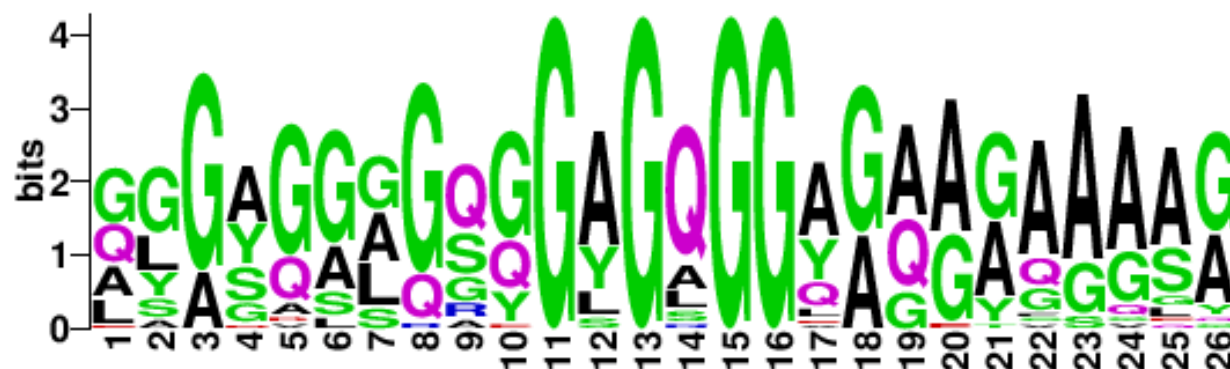




>gi|13561984|gb|AAK30595.1|AF350266\_1 major ampullate spidroin 1, partial [Argiope trifasciata]

AAAAAAAAAGGQGGQGGYDGLGSQGAGQGGYQGGAAAAAAAAASGAGSAQRGGLGAGGAGQGYGAGSGGQ  
GGAGQGGAAAATAAAAGGQGGQGGYGGLGSQSGGQGGYQGGAAAAAAAAASGDGGAGQEGLGAGGAGQGY  
GAGLGGQGGAGQGGAAAAAAAAAGGQGGQGGYGGLGSQGAGQGGYQGGAAAAAAAAASGAGGAGQGG LGA  
AGAGQGYGAGSGGQGGAGQGGAAAAAAAAAGGQGGQGGYGGLGSQGAGQGGYQGGVAAAAAAAAASGAGGA  
GRGGLGAGGAGQGYGAVSGGQGGAGQGG EAAAAAAAAAGGQGGQGGYGGLGSQGAGQGGYQGGAAAAAAAA  
ASGAGGARRGGLGAGGAGQGYGAGLGGQGGAGQGSASAAAAAAAAAGGQGGQGGYGGLGSQSGGQGGYQGG  
AAAAAAAAASGAGGAGRGS LGAGGAGQGYGAGLGGQGGAGQGGAAAAASAAAGGQGGQGGYGGLGSQGAGQ  
GGYQGGAAAAAAAAASAGGQGGQGGYGGLGSQGAGQGGYGGGAFSGQGGGAASVATASAAASRLSSPGAASR  
VSSAVTSLVSSGGPTNSAALSNTISNVVSQISSSNPGLSGCDVLVQALLEIVSALVHILGSANIGQVNSS  
GVGRSASIVGQSINQAFS

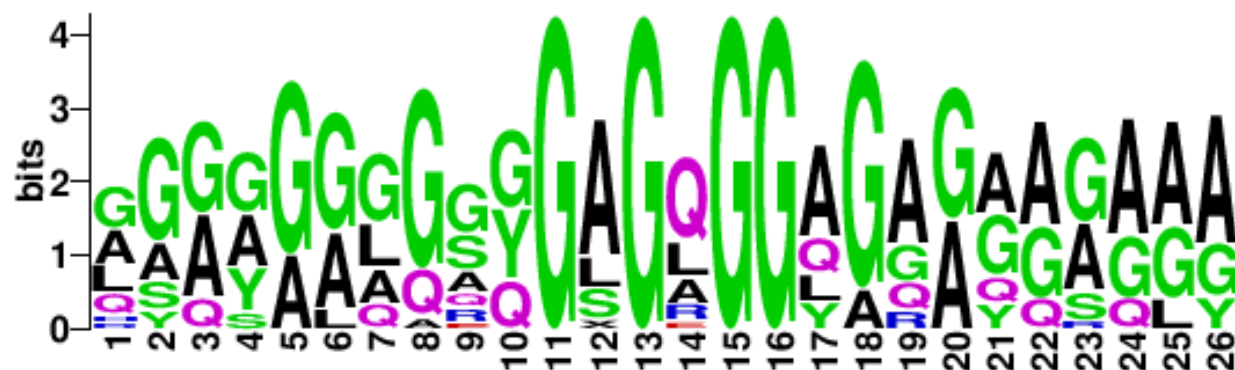
The [weblogo](#) created from 20 neighbouring amino acids of this motif is shown below



>gi|13561976|gb|AAK30591.1|AF350262\_1 major ampullate spidroin 1, partial [Argiope aurantia]

AGQGGAGAAAAAAGGAGGAGRGGLGAGGAGQGYGSLGGQGGAGGGAAAAAAGGQGGQGGYGGGLG  
SQGAGQGGYGAGQGGAGAAAAAAGGAGGAGRGGLGAGGAGQGYGSLGGQGGAGQGGAAAAAAGGQ  
GGQGGYGGGLGSQGAGQGGAGRGAAAAAAGGQGGRGYGGGLGSQGAGQGGYGAGQGGAGAAAAAAGG  
AGEGGLGAGGAGQGYGSLGGQGGAGQGGAAAAAAGGQGGHGGYGGGLGSQGAGQGGAGRGAAAAA  
GGQGGQGGYGGGLGSQGAGQGGYGAGQGGAAAAAAGGAGGAGRGELGAGGAGQGYGXGLGGQGGAGQ  
RGAAVAALAGGQGGQGGFGGFSSQGAGQGAYGGGAYSGQGAASVSAASAAASRLSSPGAASRVSSAVT  
SLVSSGGPTNPAALSNTISXVVSQIS

The [weblogo](#) created from 20 neighbouring amino acids of this motif is shown below





>gi|395318526|gb|AFN54362.1| major ampullate silk protein 1, partial [Argiope bruennichi]

GAASAAAAAGGQGGRGFGGLGSQGE**GAGQGG**AGAAAAAAGADG**GFGLGGY**GAGRGY**GAGLGG**AGGA  
GAASAAAAAGGQGGRSFGGLGSQGAG**GAGQGG**AGAAAAAAGADG**GSGLGGY**GAGRGYASLGGADGA  
GAASAAAAAGGQGGRGFGGLGSQGAG**GAGQGG**AGAAAAAASGDG**GSGLGGY**GAGRGY**GAGLGG**AGGA  
GAASAAAAAGGEGGRGFGGLGSQGAG**GAGQGG**SLAAAAAAGADG**GSGLGGY**GAGRGY**GAGLGG**ADGA  
GAASAAAAAGGQGGRGFGRLGSQGAG**GAGQGG**AGAAAVAAAGGDG**GSGLGGY**GAGRGY**GAGLGG**AGGA  
GAASAAAAAGGQGGRGFGGLGSQGAG**GAGQGG**AGAAASGDG**GSGLGGY**GAGRGY**GAGLGG**ADGAGAASA  
ASAAGGQGGRGFGGLGSQGAG**GAGQGG**AGAAAAATAGGDG**GSGLGGY**GAGRGY**GAGLGG**AGGAGAASA  
AAAAGGQGGRGFGGLGSQGAG**GAGQGG**AGAAAAAAGGDG**GSGLGGY**GAGRGH**GVGLGG**AGGAGAASA  
AAAAGGQGGRGFGGLGSQGAG**GAGQGG**AGAAAAAAGGDG**GSGLGGY**GAGRGH**GAGLGG**AGGAGAASA  
AAAAGGQGGRGFGGLGSQSG**GAGQGG**SGAAAAAAGGDG**GSGLGGY**GAGRGY**GAGLGG**AGGAGAASA  
AAAAGGQGGRGFGGLGSQGAG**GAGQGG**SGAAAAAAVADG**GSGLGGY**GAGRGY**GAGLGG**AGGAGAASA  
AAATGGQGGRGFGGLSSQGAG**GAGQGG**SGAAAAAAGDGGSLGDYAGRGY**GAGLGG**AGGAGVASA  
AASAAASRLSSPSAASRVSSAVTSLISGGGPTNPAALSNTFNSNVVYQISVSSPGLSGCDVLIQALLELVS  
ALVHILGSAIIGQVNSSAAGESASLVGQSVYQAFS

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