

Supplementary Information for “Analysis of the Effect of Degree Correlation on the Size of Minimum Dominating Sets in Complex Networks”

Yu Bao, Simone Marini, Takeyuki Tamura, Mayumi Kamada, Shingo Maegawa, Hiroshi Hosokawa, Jiangning Song, Tatsuya Akutsu

Protein Expression in Caspase Cleavage Assay

Both glutathione S transferase (GST) sequence and 5x myc tagged EGFP sequence were subcloned into pT7IRESmyc (pT7GSTmycEGFP). The DNA sequences corresponding to candidate caspase target peptide sequences were hybridized and subcloned into pT7GSTmycEGFP. The fusion protein, containing candidate caspase target sequence, was made by using with human cell-free protein expression system (Clontech) according to manufactures instruction. Primer pairs used in this study are as follows:

DEVD:

GGGGCCCCTGGGATCCGACGAGGTGGACGGATCCCATCGATTTA
CCCCGGGGACCCTAGGCTGCTCCACCTGCCTAGGGTAGCTAAAT

IETD:

GGGGCCCCTGGGATCCATCGAGACCGACGGATCCCATCGATTTA
CCCCGGGGACCCTAGGTAGCTCTGGCTGCCTAGGGTAGCTAAAT

DSVDGSLT:

GGGGCCCCTGGGATCCGACAGCGTCGACGGCAGCCTGACCGGATCCCATCGATTT
CCCCGGGGACCCTAGGCTGTGCGAGCTGCCGTCGGACTGGCCTAGGGTAGCTAAAT

EEVDGAPR:

GGGGCCCCTGGGATCCGAGGAGGTGGACGGCGCTCCTCGGGGATCCCATCGATTTA
CCCCGGGGACCCTAGGCTCCTCCACCTGCCGCGAGGAGCCCCTAGGGTAGCTAAAT

DVVDGADT:

GGGGCCCCTGGGATCCGACGTGGTGGACGGCGCCGACACCCGGATCCCATCGATTTA
CCCCGGGGACCCTAGGCTGCACCACCTGCCGCGGCTGTGGCCTAGGGTAGCTAAAT

EEVDGSSP:

GGGGCCCCTGGGATCCGAGGAGGTGGACGGCAGCAGCCCCGGATCCCATCGATTTA
:CCCCGGGGACCCTAGGCTCCTCCACCTGCCGTCGTCCGGGCTAGGGTAGCTAAAT

EEVDSGQG:

GGGGCCCCTGGGATCCGAGGAGGTGGACGGCAGCCAGGGCGGATCCCATCGATTTA
CCCCGGGGACCCTAGGCTCCTCCACCTGCCGTCGGTCCCGCCTAGGGTAGCTAAAT

EETDGLDP:

GGGGCCCCTGGGATCCGAGGAGACCGACGGCCTGGACCCCGGATCCCATCGATTTA
CCCCGGGGACCCTAGGCTCCTCTGGCTGCCGGACCTGGGGCCTAGGGTAGCTAAAT

EETDGLHE:

GGGGCCCCTGGGATCCGAGGAGACCGACGGCCTGCACGAGGGATCCCATCGATTTA
CCCCGGGGACCCTAGGCTCCTCTGGCTGCCGGACGTGCTCCCTAGGGTAGCTAAAT

EEPDSANS:

GGGGCCCCTGGGATCCGAGGAGCCCGACAGCGCCAACAGCGGATCCCATCGATTTA
CCCCGGGGACCCTAGGCTCCTCGGGCTGTCCGGTTGTCCCTAGGGTAGCTAAAT

AEVDGATP:

GGGGCCCCTGGGATCCGCCGAGGTGGACGGCGCCACCCCTGGATCCCATCGATTTA
CCCCGGGGACCCTAGGCGGCTCCACCTGCCGCGGTGGGGACCTAGGGTAGCTAAAT

SEVDGNDS:

GGGGCCCCTGGGATCCAGCGAGGTGGACGGCAACGACAGCGGATCCCATCGATTTA
CCCCGGGGACCCTAGGTCGCTCCACCTGCCGTTGCTGTCGCCTAGGGTAGCTAAAT

EEP DGGFR:

GGGGCCCCTGGGATCCGAGGAGCCCGACGGCGGCTTCCGGGGATCCCATCGATTTA
CCCCGGGGACCCTAGGCTCCTCGGGCTGCCGCCGAAGGCCCTAGGGTAGCTAAAT

DDPDSAYL:

GGGGCCCCTGGGATCCGACGACCCTGACAGCGCCTACCTGGGATCCCATCGATTTA
CCCCGGGGACCCTAGGCTGCTGGGACTGTCGCGGATGGACCCTAGGGTAGCTAAAT

NEVDGSNE:

GGGGCCCCTGGGATCCAACGAGGTGGACGGCAGCAACGAGGGATCCCATCGATTTA
CCCCGGGGACCCTAGGTTGCTCCACCTGCCGTCGTTGCTCCCTAGGGTAGCTAAAT

SEIDGLKG:

GGGGCCCCTGGGATCCAGCGAGATCGACGGCCTGAAGGGCGGATCCCATCGATTTA
CCCCGGGGACCCTAGGTCGCTCTAGCTGCCGGACTTCCCGCCTAGGGTAGCTAAAT

GEVDGKAI:

GGGGCCCCTGGGATCCGGCGAGGTGGACGGCAAGGCCATCGGATCCCATCGATTTA
CCCCGGGGACCCTAGGCCGCTCCACCTGCCGTTCCGGTAGCCTAGGGTAGCTAAAT

DDTDGLTP:

GGGGCCCCTGGGATCCGACGACACCGACGGCCTGACCCCTGGATCCCATCGATTTA
CCCCGGGGACCCTAGGCTGCTGTGGCTGCCGGACTGGGGACCTAGGGTAGCTAAAT

LES DSESL:

GGGGCCCCTGGGATCCCTGGAGAGCGACAGCGAGAGCCTGGGATCCCATCGATTTA
CCCCGGGGACCCTAGGGACCTCTCGCTGTCGCTCTCGGACCCTAGGGTAGCTAAAT

TEPDSPSP:

GGGGCCCCTGGGATCCACCGAGCCCGACAGCCCCAGCCCCGGATCCCATCGATTTA
CCCCGGGGACCCTAGGTGGCTCGGGCTGTCGGGGTCGGGGCCTAGGGTAGCTAAAT

AEVDGVDE:

GGGGCCCCTGGGATCCGCCGAGGTGGACGGCGTGGACGAGGGATCCCATCGATTTA
CCCCGGGGACCCTAGGCGGCTCCACCTGCCGCACCTGCTCCCTAGGGTAGCTAAAT

DETDSGAG:

GGGGCCCCTGGGATCCGACGAGACCGACAGCGGGCGCCGGCGGATCCCATCGATTTA
CCCCGGGGACCCTAGGCTGCTCTGGCTGTCGCCGCGGCCGCCTAGGGTAGCTAAAT

TEMDSETL:

GGGGCCCCTGGGATCCACCGAGATGGACAGCGAGACCCTGGGATCCCATCGATTTA
CCCCGGGGACCCTAGGTGGCTCTACCTGTCGCTCTGGGACCCTAGGGTAGCTAAAT

LEMDSVLK:

GGGGCCCCTGGGATCCCTGGAGATGGACAGCGTGCTGAAGGGATCCCATCGATTTA
CCCCGGGGACCCTAGGGACCTCTACCTGTCGCACGACTTCCCTAGGGTAGCTAAAT

TETDSVGT:

GGGGCCCCTGGGATCCACCGAGACCGACAGCGTGGGCACCGGATCCCATCGATTTA
CCCCGGGGACCCTAGGTGGCTCTGGCTGACGCACCCGTGGCCTAGGGTAGCTAAAT

TEEDSVSV:

GGGGCCCCTGGGATCCACCGAGGAGGACAGCGTGAGCGTGGGATCCCATCGATTTA
CCCCGGGGACCCTAGGTGGCTCCTCCTGTCGCACTCGCACCCCTAGGGTAGCTAAAT

DETDSPTV:

GGGGCCCCTGGGATCCGACGAGACCGACAGCCCTACCGTGGGATCCCATCGATTTA
CCCCGGGGACCCTAGGCTGCTCTGGCTGTCGGGATGGCACCCCTAGGGTAGCTAAAT

DEVGDAND:

GGGGCCCCTGGGATCCGACGAGGTGGACGGCGCCAACGACGGATCCCATCGATTTA
CCCCGGGGACCCTAGGCTGCTCCACCTGCCGCGGTTGCTGCCTAGGTTAGCTAAAT