

Human Dys R16

MEISYVPSTYLTEITHVSQALLEVEQLLNAPDLCAKDFEDLFKQEESLKNIKDSLQQSSGRIDIIHSKKTAALQSATPVER

Human Dys R17

VKLQEALSQDFQWEKVNKMYKDRQGRFDRSVEKWRRFHYDIKIFNQWLTEAEQFLRKTQIPENWEHAKYKWYLKELQDGIV

Linker

GQRQTVVRTLNATGEEIIQQSSKTDASILQEKLGSNLRLWQEVCKQLSDRKRL
EEGGSGLLLQRRRTVORKADAGGLGIS

Mouse α1-syntrophin PDZ

IKGGRENKMPILISKIFKGLAADQTEALFGDAILSVNGEDLSSATHDEAVQALKKTGKEVVLEV
KYMKEVSPYFILEVSK

GFP

GEELFTGVVPILVELGDVNNGHKFSVSGEGEGDATYGKLT
LKFI
TTGKLPWP
VTLV
TTLTYGVQCFSRYPDHMKQHDFF

KSAMPEGYVQERTIFFKDDGNYKTRAEVKFEGDTLVNR
IELKGIDFKEDGNILGHKLEYN
YNSHN
VYIMADKQKNGIKVNF

Pal

KIRHNIEDGSVQLADHYQQNTPIGDGPVLLPDNHYLSTQS
ALSKDPNEKRDHMVL
LEFV
TAAGITLG
MDEL
YKKDG
KKKK

KS
TK
CVIM

Supplementary Fig 1. The full amino acid sequence of dystrophin R16/17-syntrophin PDZ.GFP.Pal fusion protein. The subdomains of the fusion protein was annotated by different colors (R16, R17, linker, syntrophin-PDZ, GFP, Pal).