Dysferlin Antibodies

**Please see below (page 4) for a graphical representation of all the known dysferlin peptide sequences used to generate antibodies

<u>NCL-Hamlet</u>

Type: mouse monoclonal IgG1
Synthetic peptide: amino acids 1999-2016 (exon 53)
Reactive species: human, mouse, rat, rabbit, hamster, pig, dog
Non-reactive species: chicken
Information: http://www.novocastra.co.uk/data/md/hamlet.pdf

Availability: Novocastra Laboratories Ltd
                                    http://www.novocastra.co.uk
                                    Newcastle upon Tyne, NE12 8EW
                                    UK
                                    Phone: +44 (0) 191 215 0567
                                    Fax: +44 (0) 191 215 1152

                                    Local distributors (US, Europe, India, etc):
                                    http://www.novocastra.co.uk/dist.htm

<u>NCL-Hamlet-2</u>

Type: mouse monoclonal IgG2b, kappa
Synthetic peptide: amino acids 349-366 (exons 11-12)
Reactive species: human, rabbit, hamster, pig, dog
Non-reactive species: mouse, rat, chicken
Information: http://www.novocastra.co.uk/data/md/hamlet-2.pdf

Availability: Novocastra Laboratories Ltd
                                    http://www.novocastra.co.uk
                                    Newcastle upon Tyne, NE12 8EW
                                    UK
                                    Phone: +44 (0) 191 215 0567
                                    Fax: +44 (0) 191 215 1152

                                    Local distributors (US, Europe, India, etc):
                                    http://www.novocastra.co.uk/dist.htm

ab15108

Type: rabbit polyclonal IgG
Synthetic peptide: unavailable
Reactive species: human, mouse (predicted)
Information: http://www.abcam.com/index.html?datasheet=15108

Availability: Abcam, Inc
                               http://www.abcam.com
                               Cambridge, MA 02139
                               U.S.A.
                               Phone: 888-77-ABCAM or 617-225-2272
                               Fax: 617-507-5831
                               Email: us-orders@abcam.com

                               Local distributors (Europe, India, etc):
                               http://www.abcam.com/index.html?pageconfig=distributors

C-19

Type: goat polyclonal IgG
Synthetic peptide: internal region of dysferlin
Reactive species: human, mouse, rat
Information: http://www.scbt.com/datasheets_list/sc-16635.pdf

Availability: Santa Cruz Biotechnology, Inc
                               http://www.scbt.com
                               Santa Cruz, CA 95060
                               U.S.A.
                               Phone: 800-457-3801 or 831-457-3800
                               Fax: 831-457-3801
                               Email: scbt@scbt.com

E-20

Type: goat polyclonal IgG
Synthetic peptide: internal region of dysferlin
Reactive species: human, mouse, rat
Information: http://www.scbt.com/datasheets_list/sc-16634.pdf

Availability: Santa Cruz Biotechnology, Inc
                               http://www.scbt.com
                               Santa Cruz, CA 95060
                               U.S.A.
                               Phone: 800-457-3801 or 831-457-3800
                               Fax: 831-457-3801
                               Email: scbt@scbt.com

SmaI

Type:	rabbit polyclonal
Synthetic peptide:	XmnI fragment: amino acids 623-865 (exons 20-25)
Reactive species:	human
Information:	Matsuda C, et al. 1999. *Neurology* 53:1119-1122

SalI

Type:	rabbit polyclonal
Synthetic peptide:	SalI fragment: amino acids 1666-1788 (exons 45-48)
Reactive species:	human
Information:	Matsuda C, et al. 1999. *Neurology* 53:1119-1122

BamHI

Type:	rabbit polyclonal
Synthetic peptide:	BstYI/BamHI fragment: amino acids 254-405 (exons 7-13)
Reactive species:	human
Information:	Matsuda C, et al. 1999. *Neurology* 53:1119-1122

HM38

Type:	rabbit polyclonal
Synthetic peptide:	amino acids 2071-2080 (exon 55)
Reactive species:	mouse
Information:	Ho M, et al. 2004. *Human Molecular Genetics* 13(18):1999-2010

F4

Type:	llama heavy-chain antibody (HCAb) fragment
Synthetic peptide:	amino acids 2-245
Reactive species:	human
Information:	Huang Y, et al. 2005. *European J of Human Genetics* 13:721-730

H7

Type:	llama heavy-chain antibody (HCAb) fragment
Synthetic peptide:	amino acids 1666-1788
Reactive species:	human
Information:	Huang Y, et al. 2005. *European J of Human Genetics* 13:721-730

Dysferlin protein sequence (accession number NM_003494) showing the positions of peptide fragments used to generate anti-DYSF antibodies.

Each antibody name is shown above the sequence of the peptide fragment that was used for immunization.

Exon boundaries are shown underneath the sequence: for example, 1|2 marks the boundary between exons 1 and 2.

Legend:
Monoclonal Ab or HCAb
Polyclonal Ab
Overlapping Abs

M**LRVFILYAE** **NVHTPDTDIS** **DAYCSAVFAG** **VKKRTKVIKN** **SVNPVWNEGF** **EWDLKGIPLD**   60
                              1|2   2|3

QGSELHVVVK **DHETMGRNRF** **LGEAKVPLRE** **VLATPSLSAS** **FNAPLLDTKK** **QPTGASLVLQ** 120
                 3|4   4|5

                            F4
VSYTPLPGAV **PLFPPPTPLE** **PSPTLPDLDV** **VADTGGEEDT** **EDQGLTGDEA** **EPFLDQSGGP** 180
                            5|6

GAPTTPRKLP **SRPPPHYPGI** **KRKRSAPTSR** **KLLSDKPQDF** **QIRVQVIEGR** **QLPGVNIKPV** 240
                                          6|7

VKVTAAGQTK RTR**IHKGNSP** **LFNETLFFNL** **FDSPGELFDE** **PIFITVVDSR** **SLRTDALLGE** 300
                            7|8   8|9

                                                      NCL-Hamlet-2
             BamHI   **EA PLERKDPSED**
FRMDVGTIYR **EPRHAYLRKW** **LLLSDPDDFS** **AGARGYLKTS** **LCVLGPGDEA** **PLERKDPSED** 360
 9|10   10|11   11|12

KEDIES
KEDIESNLLR **PTGVALRGAH** **FCLKVFRAED** **LPQMDDAVMD** **NVKQI**FGFES NKKNLVDPFV 420
                                          12|13

EVSFAGKMLC SKILEKTANP QWNQNITLPA MFPSMCEKMR IRIIDWDRLT HNDIVATTYL 480
      13|14   14|15   15|16

SMSKISAPGG EIEEEPAGAV KPSKASDLDD YLGFLPTFGP CYINLYGSPR EFTGFPDPYT 540
             16|17   17|18

ELNTGKGEGV AYRGRLLLSL ETKLVEHSEQ KVEDLPADDI LRVEKYLRRR KYSLFAAFYS 600
      18|19   19|20

ATMLQDVDDA IQFEVSIGNY GN**KFDMTCLP LASTTQYSRA VFDGCHYYYL PWGNVKPVVV** 660
                                              20|21

LSSYWEDISH RIETQNQLLG IADRLEAGLE QVHLALKAQC STEDVDSLVA QLTDELIAGC 720
              21|22   22

                              SmaI
SQPLGDIHET PSATHLDQYL YQLRTHHLSQ ITEAALALKL GHSELPAALE QAEDWLLRLR 780
|23

ALAEEPQNSL PDIVIWMLQG DKRVAYQRVP AHQVLFSRRG ANYCGKNCGK LQTIFLKYPM 840
   23|24   24|25

EKVPGARMPV QIRVKLWFGL SVDEKEFNQF AEGKLSVFAE TYENETKLAL VGNWGTTGLT 900
                                    25|26

YPKFSDVTGK IKLPKDSFRP SAGWTWAGDW FVCPEKTLLH DMDAGHLSFV EEVFENQTRL 960
                                    26|27

PGGQWIYMSD NYTDVNGEKV LPKDDIECPL GWKWEDEEWS TDLNRAVDEQ GWEYSITIPP 1020
                27|28   28|29

ERKPKHWVPA EKMYYTHRRR RWVRLRRRDL SQMEALKRHR QAEAEGEGWE YASLFGWKFH 1080
                                    29|30

LEYRKTDAFR RRRWRRRMEP LEKTGPAAVF ALEGALGGVM DDKSEDSMSV STLSFGVNRP 1140
                                    30|31

TISCIFDYGN RYHLRCYMYQ ARDLAAMDKD SF**S**DPYAIVS FLHQSQKTVV VKNTLNPTWD 1200
       31|32   32|33

QTLIFYEIEI FGEPATVAEQ PPSIVVELYD HDTYGADEFM GRCICQPSLE RMPRLAWFPL 1260
                                    33|34

TRGSQPSGEL LASFELIQRE KPAIHHIPGF EVQETSRILD ESEDTDLPYP PPQREANIYM 1320
                  34|35   35|36   36|37

VPQNIKPALQ RTAIEILAWG LRNMKSYQLA NISSPSLVVE CGGQTVQSCV IRNLRKNPNF 1380
                 37|38

DICTLFMEVM LPREELYCPP ITVKVIDNRQ FGRRPVVGQC TIRSLESFLC DPYSAESPSP 1440
                 38|39

QGGPDDVSLL SPGEDVLIDI DDKEPLIPIQ EEEFIDWWSK FFASIGEREK CGSYLEKDFD 1500
   39|40   40|41

TLKVYDTQLE NVEAFEGLSD FCNTFKLYRG KTQEETEDPS VIGEFKGLFK IYPLPEDPAI 1560
 41|42   42|43

PMPPRQFHQL AAQGPQECLV RIYIVRAFGL QPKDPNGKCD PYIKISIGKK SVSDQDNYIP 1620
                                43|44

CTLEPVFGKM FELTCTLPLE KDLKITLYDY DLLSKDEKIG ETVVD**LENRL LSKFGARCGL** 1680
      44|45

SalI / **H7**
PQTYCVSGPN QWRDQLRPSQ LLHLFCQQHR VKAPVYRTDR VMFQDKEYSI EEIEAGRIPN 1740
   45|46   46|47

PHLGPVEERL ALHVLQQQGL VPEHVESRPL YSPLQPDIEQ GKLQMWVDLF PKALGRPGPP 1800
                          47|48

FNITPRRARR FFLRCIIWNT RDVILDDLSL TGEKMSDIYV KGWMIGFEEH KQKTDVHYRS 1860
       48|49   49|50

LGGEGNFNWR FIFPFDYLPA EQVCTIAKKD AFWRLDKTES KIPARVVFQI WDNDKFSFDD 1920
                          50|51

FLGSLQLDLN RMPKPAKTAK KCSLDQLDDA FHPEWFVSLF EQKTVKGWWP CVAEEGEKKI 1980
 51|52

           NCL−Hamlet
LAGKLEMTLE IVAESEHE**ER PAGQGRDEPN MNPKLED**PRR PDTSFLWFTS PYKTMKFILW 2040
52|53   53|54

             HM38
RRFRWAIILF IILFILLLFL AIFIYAFPNY **AAMKLVKPFS**
             54|55