

# Tandem repeats discovery service (TReaDS) applied to finding novel cis-acting factors in repeat expansion diseases – supplementary information —

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Disease code	Gene	NCBI code
DRPLA	ATN1	NM_001007026.1
HD	HTT	NM_002111.6
SBMA	AR	NM_000044.2
SCA1	ATXN1	NM_000332.3
SCA2	ATXN2	NM_002973.3
SCA3	ATXN3	NM_004993.5
SCA6	CACNA1A	NM_000068.3
SCA7	ATXN7	NM_000333.3
SCA17	TBP	NM_003194.4

Table 1: Table of sequence NCBI codes for PolyQ TR.

Disease code	Gene	NCBI code
BPES	FOXL2	NG_012454.1
HPE5	ZIC2	NG_007085.2
CCHS	PHOX2B	NG_008243.1
ISSX	ARX	NG_008281.1
MRGH	SOX3	NG_009387.1
CCD	RUNX2	NG_008020.1
HFGS	HOXA13	NG_008181.1
SPD1	HOXD13	NG_008137.1
OPMD	PABPN1	NG_008239.1

Table 2: Table of sequence NCBI codes for PolyA TR.

Disease code	Gene	NCBI code
FRAXA/FXTAS	FMR1	NG_007529.1
FRAXE	AFF2	NG_016313.1
FRDA	FXN	U43748.1
DM1	DMPK	NM_001081560.1
DM2	ZNF9	NG_011902.1
SCA8	ATXN8OS	NR_002717.2
SCA10	ATXN10	NG_016212.1
SCA12	PPP2R2B	AF152102.1
EPM1	CSTB	NG_011545.1
HDL-2	JPH3	AF429315.1

Table 3: Table of sequence NCBI codes for non PolyA non PolyQ TR.

Gene	NCBI code
NFAT5	AF163836
vascular endothelial cadherin 2	AF240635
PRDM8	NM_020226
PRDM10	NM_020228
(TNRC3) MAML3	NM_018717.4
ATBF1-A	L32832
USP7	NM_003470
IRS1	NM_005544
DACH1	NM_004392
(ATBF1) ZFH3	NM_006885
NRG2	NM_004883
FBX11	AF176706
PCQAP	NM_015889
(DRIL2) ARID3B	NM_006465
RAI1	NM_030665.3
POU3F2	NM_005604
PALM2-AKAP2	NM_007203

Table 4: Table of Table of sequence NCBI codes for a sample of sequences containing CAG-encoded polyglutamine.

Gene/Protein	NCBI code	SNP names
FZD6	NM_003506.3	rs151339003, rs151339002
NSDHL	NM_015922.2	rs137853863, rs116840822
GJB1	NM_001097642.2	rs116840819, rs116840818, rs116840817, rs116840816, rs116840815, rs104894901, rs104894825, rs104894824, rs104894822, rs104894812
IDS	NM_006123.4	rs113993955, rs113993954, rs113993953, rs113993949, rs113993945
IDS	NM_001166550.1	rs113993951, rs113993946
SLC16A2	NM_006517.3	rs104894939, rs104894938
NSDHL	NM_015922.2	rs104894909, rs104894901
ABCB7	NM_004299.3	rs80356714, rs80356713
TIMM8A	NM_004085.3	rs80356560, rs80356559
UBA1	NM_153280.2	rs80356547, rs80356546, rs80356545
FLNA	NM_001456.3	rs80338841, rs80338837
MED12	NM_005120.2	rs80338759
PRPS1	NM_002764.3	rs80338732, rs80338731, rs80338676, rs80338675
ARSE	NM_000047.2	rs80338714, rs80338713, rs80338711, rs80338710

Table 5: Table of pathogenic SNPs in Homo sapiens from dbSNP. The table reports: gene/protein code, NCBI code for the analyzed sequence, codes of pathogenic SNP.

Gene/Protein	NCBI code	In/Del names
CFTR/MRP	NM_001171.4	rs111113625, rs72664225
OTC	-	rs111060773, rs72558496, rs111060774
OTC	NM_000531.5	rs72558496, rs72558469, rs72558460, rs72558459, rs72558458, rs72558457, rs72558453, rs72558452, rs72558439, rs72558438, rs72558434, rs72558422, rs72556285, rs72556264, rs72556255, rs72556251, rs72554357, rs72554355, rs72554354, rs72554353, rs72554343, rs72554334, rs72554314, rs72554313, rs72552299, rs72552298, rs72552297, rs67870245, rs67839039, rs67294956
HS mito- chondrion	NC_012920.1	rs111033319
NSDHL	NM_015922.2	rs121909834, rs121909833
GJB1	NM_001097642.2	rs116840823, rs116840820
SLC16A2	NM_006517.3	rs113994166, rs113994164
SLC6A8	NM_005629.3	rs80338740, rs80338739
CACNA1F	NM_005183.2	rs80359870
FLNA	NM_001456.3	rs80338840
KCNQ2	NM_172108.3	rs118192246, rs118192245, rs118192244, rs118192243, rs118192242, rs118192241, rs118192231, rs118192230, rs118192227, rs118192222, rs118192213, rs118192212, rs118192210, rs118192198, rs118192197, rs118192196, rs118192192, rs118192191, rs118192189, rs118192188, rs118192187

Table 6: Table of pathogenic in/dels in Homo sapiens from dbSNP and covering fuzzy tandem repeats. The table reports: gene/protein code, NCBI code for the analyzed sequence, codes of pathogenic in/del.