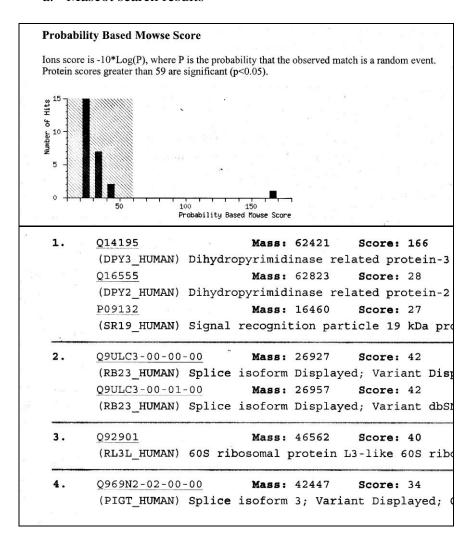
### Supplementary figure 3. Protein identification by MALDI-TOF-MS

#### a. Mascot search results



### b. The sequence coverage of identified DRP3 protein

```
Matched peptides shown in Bold Red

1 MSYQGKKNIP RITSDRLLIK GGRIVNDDQS FYADIYMEDG LIKQIGDNLI
51 VPGGVKTIEA NGKMVIPGGI DVHTHFQMPY KGMTTVDDFF QGTKAALAGG
101 TTMIIDHVVP EPESSLTEAY EKWREWADGK SCCDYALHVD ITHWNDSVKQ
151 EVQNLIKDKG VNSFMVYMAY KDLYQVSNTE LYEIFTCLGE LGAIAQVHAE
201 NGDIIAQEQT RMLEMGITGP EGHVLSRPEE LEAEAVFRAI TIASQTNCPL
251 YVTKVMSKSA ADLISQARKK GNVVFGEPIT ASLGIDGTHY WSKNWAKAAA
301 FVTSPPLSPD PTTPDYINSL LASGDLQLSG SAHCTFSTAQ KAIGKDNFTA
351 IPEGTNGVEE RMSVIWDKAV ATGKMDENQF VAVTSTNAAK IFNLYPRKGR
401 ISVGSDSDLV IWDPDAVKIV SAKNHQSAAE YNIFEGMELR GAPLVVICQG
451 KIMLEDGNLH VTQGAGRFIP CSPFSDYVYK RIKARRKMAD LHAVPRGMYD
501 GPVFDLTTTP KGGTPAGSAR GSPTRPNPPV RNLHQSGFSL SGTQVDEGVR
```

c. Peptides recognized by Peptide Fingerprinting and their position within protein sequence

Start - I	End	Observed	Mr(expt)	Mr(calc)	ppm	Miee	Sequence
362 - 3		878.4500	877.4427		ррш 7		-
							R.MSVIWDK.A
391 - 3	397	922.5200	921.5127	921.5072	6	0	K.IFNLYPR.K
150 - 3	157	971.5600	970.5527	970.5447	8	0	K.QEVQNLIK.D
259 - 2	268	1031.5700	1030.5627	1030.5407	21	0	K.SAADLISQAR.K
123 - 3	130	1047.5300	1046.5227	1046.4934	28	1	K.WREWADGK.S
8 - 3	16	1071.5600	1070.5527	1070.5832	-29	1	K.NIPRITSDR.L
521 - 3	531	1177.6200	1176.6127	1176.6364	-20	0	R.GSPTRPNPPVR.N
44 - !	56	1309.7500	1308.7427	1308.7402	2	0	K.QIGDNLIVPGGVK.T
82 - 9	94	1446.6900	1445.6827	1445.6497	23	0	K.GMTTVDDFFQGTK.A
82 - 9	94	1462.6900	1461.6827	1461.6446	26	0	K.GMTTVDDFFQGTK.A Oxidation (M)
497 - 3	511	1657.8100	1656.8027	1656.7706	19	0	R.GMYDGPVFDLTTTPK.G Oxidation (M)
158 - 3	171	1668.8500	1667.8427	1667.7687	44	1	K.DKGVNSFMVYMAYK.D Oxidation (M)
452 - 4	467	1710.8800	1709.8727	1709.8519	12	0	K. IMLEDGNLHVTQGAGR.F
375 - 3	390	1725.8600	1724.8527	1724.8039	28	0	K.MDENQFVAVTSTNAAK.I
452 - 4	467	1726.8600	1725.8527	1725.8468	3	0	K.IMLEDGNLHVTQGAGR.F Oxidation (M)
375 - 3	390	1741.7900	1740.7827	1740.7989	-9	0	K.MDENQFVAVTSTNAAK.I Oxidation (M)
346 - 3	361	1748.8400	1747.8327	1747.8013	18	0	K.DNFTAIPEGTNGVEER.M
424 - 4	440	2008.9400	2007.9327	2007.9108	11	0	K.NHQSAAEYNIFEGMELR.G
424 -	440	2024.9400	2023.9327	2023.9057	13	0	K.NHQSAAEYNIFEGMELR.G Oxidation (M)
342 - 3	361	2118.0700	2117.0627	2117.0389	11	1	K.AIGKDNFTAIPEGTNGVEER.M

## d. Sequence homology between DRP3 and DRP1 demonstrated by BLAST analysis

36.0%		
Graphica	al alignment	
In origin	al sequence: 1 - 569 ( total: 570 )	
Raw alig	nment	
~ -	: MSYQGKKNIPRITSDRLLIKGGRIVNDDQSFYADIYMEDGLIKQIGDNLIVPGGV : MSYQGKK+IP ITSDRLLIKGGRI+NDDQS YAD+Y+EDGLIKQIG+NLIVPGGV : MSYQGKKSIPHITSDRLLIKGGRIINDDQSLYADVYLEDGLIKQIGENLIVPGGV	1-55
	: KTIEANGKMVIPGGIDVHTHFQMPYKGMTTVDDFFQGTKAALAGGTTMIIDHVVP	56-110
Q14194	: KTIEANG+MVIPGGIDV+T+ Q P +GMT DDFFQGT+AAL GGTTMIIDHVVP : KTIEANGRMVIPGGIDVNTYLQKPSQGMTAADDFFQGTRAALVGGTTMIIDHVVP	56-110
Query	: EPESSLTEAYEKWREWADGKSCCDYALHVDITHWNDSVKQEVQNLIKDKGVNSFM : EP SSL ++EKW E AD KSCCDY+LHVDIT W D V++E++ L++DKGVNSF	111-165
Q14194	: EPGSSLLTSFEKWHEAADTKSCCDYSLHVDITSWYDGVREELEVLVQDKGVNSFQ	111-165
Query	: VYMAYKDLYQVSNTELYEIFTCLGELGAIAQVHAENGDIIAQEQTRMLEMGITGP : VYMAYKD+YQ+S+++LYE FT L LGA+ VHAENGD+IAQEQ R+LEMGITGP	166-220
Q14194	: VYMAYKDVYQMSDSQLYEAFTFLKGLGAVILVHAENGDLIAQEQKRILEMGITGP	166-220
Query	: EGHVLSRPEELEAEAVFRAITIASQTNCPLYVTKVMSKSAADLISQARKKGNVVF : EGH LSRPEELEAEAVFRAITIA + NCP+Y+TKVMSKSAAD+I+ ARKKG +VF	221-275
Q14194	: EGHALSRPEELEAEAVFRAITIAGRINCPVYITKVMSKSAADIIALARKKGPLVF	221-275
Query	: GEPITASLGIDGTHYWSKNWAKAAAFVTSPPLSPDPTTPDYINSLLASGDLQLSG : GEPI ASLG DGTHYWSKNWAKAAAFVTSPPLSPDPTTPDY+ SLLA GDLQ++G	276-330
Q14194	: GEPIAASLGTDGTHYWSKNWAKAAAFVTSPPLSPDPTTPDYLTSLLACGDLQVTG	276-330
Query	: SAHCTFSTAQKAIGKDNFTAIPEGTNGVEERMSVIWDKAVATGKMDENQFVAVTS : S HC +STAQKA+GKDNFT IPEG NG+EERM+V+WDKAVATGKMDENQFVAVTS	331-385
Q14194	: SGHCPYSTAQKAVGKDNFTLIPEGVNGIEERMTVVWDKAVATGKMDENQFVAVTS	331-385
Query	: TNAAKIFNLYPRKGRISVGSDSDLVIWDPDAVKIVSAKNHQSAAEYNIFEGMELR : TNAAKIFNLYPRKGRI+VGSD+D+VIWDPD +K ++AK+H+SA EYNIFEGME	386-440
Q14194	: TNAAKIFNLYPRKGRIAVGSDADVVIWDPDKLKTITAKSHKSAVEYNIFEGMECH	386-440
Query	: GAPLVVICQGKIMLEDGNLHVTQGAGRFIPCSPFSDYVYKRIKARRKMADLHAVP : G+PLVVI QGKI+ EDGN++V +G GRFIP F +++Y+R+K R K+ L V	441-495
Q14194	: GSPLVVISQGKIVFEDGNINVNKGMGRFIPRKAFPEHLYQRVKIRNKVFGLQGVS	441-495
Query	: RGMYDGPVFDLTTTPKGGTPAGSARGSPTRPN-PPVRNLHQSGFSLSGTQVDE-G : RGMYDGPV+++ TPK TPA SA+ SP++ PP+RNLHQS FSLSG Q+D+	496-548
Q14194	: RGMYDGPVYEVPATPKYATPAPSAKSSPSKHQPPPIRNLHQSNFSLSGAQIDDNN	496-550
-	: VRSASKRIVAPPGGRSNITSL 549-569 : R RIVAPPGGRSNITSL	
Q14194	: PRRTGHRIVAPPGGRSNITSL 551-571	

## e. Sequence homology between DRP3 and DRP2

0		
-	l alignment	
In origin	ıl sequence: 1 - 569 ( total: 570 )	
Raw alig	nment	
Query	: MSYQGKKNIPRITSDRLLIKGGRIVNDDQSFYADIYMEDGLIKQIGDNLIVPGGV : MSYQGKKNIPRITSDRLLIKGG+IVNDDQSFYADIYMEDGLIKQIG+NLIVPGGV	1-55
Q16555	: MSYQGKKNIPRITSDRLLIKGGKIVNDDQSFYADIYMEDGLIKQIGENLIVPGGV	1-55
Query	: KTIEANGKMVIPGGIDVHTHFQMPYKGMTTVDDFFQGTKAALAGGTTMIIDHVVP : KTIEA+ +MVIPGGIDVHT FQMP +GMT+ DDFFQGTKAALAGGTTMIIDHVVP	56-110
Q16555	: KTIEAHSRMVIPGGIDVHTRFQMPDQGMTSADDFFQGTKAALAGGTTMIIDHVVP	56-110
Query	: EPESSLTEAYEKWREWADGKSCCDYALHVDITHWNDSVKQEVQNLIKDKGVNSFM	111-165
016555	: EP +SL A+++WREWAD KSCCDY+LHVDI+ W+ +++E++ L+KD GVNSF+ : EPGTSLLAAFDQWREWADSKSCCDYSLHVDISEWHKGIQEEMEALVKDHGVNSFL	111-165
×10222	. FLGIODDWHIDXWYEWNOOCOLODUANISEMUKGIXEEWEWTAKDUGANOIF	111-102
Query	: VYMAYKDLYQVSNTELYEIFTCLGELGAIAQVHAENGDIIAQEQTRMLEMGITGP	166-220
016555	: VYMA+KD +Q+++ ++YE+ + + ++GAIAQVHAENGDIIA+EQ R+L++GITGP : VYMAFKDRFQLTDCQIYEVLSVIRDIGAIAQVHAENGDIIAEEQQRILDLGITGP	166-220
Ø16222	: VIMARKDREQLIDCQITEVL5VIRDIGATAQVNAENGDITAEEQQRILDLGITGP	100-220
Query	: EGHVLSRPEELEAEAVFRAITIASQTNCPLYVTKVMSKSAADLISQARKKGNVVF : EGHVLSRPEE+EAEAV RAITIA+QTNCPLY+TKVMSKS+A++I+QARKKG VV+	221-275
016555	: EGHVLSRPEEVEAEAV RAIIIA+QINCPLI+IKVMSKS+A++1+QAKKKG VV+ : EGHVLSRPEEVEAEAVNRAITIANQTNCPLYITKVMSKSSAEVIAQARKKGTVVY	221-275
*******		
Query	: GEPITASLGIDGTHYWSKNWAKAAAFVTSPPLSPDPTTPDYINSLLASGDLQLSG	276-330
016555	: GEPITASLG DG+HYWSKNWAKAAAFVTSPPLSPDPTTPD++NSLL+ GDLQ++G : GEPITASLGTDGSHYWSKNWAKAAAFVTSPPLSPDPTTPDFLNSLLSCGDLQVTG	276-330
Ž16222	. GEFTIAGEGIDGSHIWSKWAKAARFVIGFFEGFDFTIFDFENGLEGGDEQVIG	270-330
Query	: SAHCTFSTAQKAIGKDNFTAIPEGTNGVEERMSVIWDKAVATGKMDENQFVAVTS	331-385
01.6555	: SAHCTF+TAQKA+GKDNFT IPEGTNG EERMSVIWDKAV TGKMDENQFVAVTS : SAHCTFNTAQKAVGKDNFTLIPEGTNGTEERMSVIWDKAVVTGKMDENQFVAVTS	331-385
Ø10222	: SARCIFNIAQKAVGKDNFILIPEGINGIEEKMSVIWDKAVVIGKMDENQFVAVIS	331-365
Query	: TNAAKIFNLYPRKGRISVGSDSDLVIWDPDAVKIVSAKNHQSAAEYNIFEGMELR : TNAAK+FNLYPRKGRI+VGSD+DLVIWDPD+VK +SAK H S+ EYNIFEGME R	386-440
016555	: INAAK+FNLYPKKGKI+VGSD+DLVIWDPD+VK +SAK H S+ EYNIFEGME K : TNAAKVFNLYPRKGRIAVGSDADLVIWDPDSVKTISAKTHNSSLEYNIFEGMECR	386-440
×10000	. IMARY INDICIONARY COURSES THE BUYER COMMISSION OF THE BUYER	300 440
Query	: GAPLVVICQGKIMLEDGNLHVTQGAGRFIPCSPFSDYVYKRIKARRKMADLHAVP	441-495
016555	: G+PLVVI QGKI+LEDG LHVT+G+GR+IP PF D+VYKRIKAR ++A+L VP : GSPLVVISQGKIVLEDGTLHVTEGSGRYIPRKPFPDFVYKRIKARSRLAELRGVP	//1_/OF
×10222	. GOTEVVIONOTIVEDGITUVIEGGGKIIPKKPTPDTVIKKIKAKOKLAELKGVP	441-430
Query	: RGMYDGPVFDLTTTPKGGTPAGSARGSPTRPN-PPVRNLHQSGFSLSGTQVDEGV	496-549
01.6555	: RG+YDGPV +++ TPK TPA SA+ SP + PPVRNLHQSGFSLSG Q+D+ +	406 550
Ø10222	: RGLYDGPVCEVSVTPKTVTPASSAKTSPAKQQAPPVRNLHQSGFSLSGAQIDDNI	490-550
Query	: -RSASKRIVAPPGGRSNITSL 550-569	
	: R ++RIVAPPGGR+NITSL	
Q16555	: PRRTTQRIVAPPGGRANITSL 551-571	

# f. Sequence homology between DRP3 and DRP4

Graphics	l alignment	
-	-	
In origina	al sequence: 1 - 570 ( total: 570 )	
Raw alig	nment	
	: MSYQGKKNIPRITSDRLLIKGGRIVNDDQSFYADIYMEDGLIKQIGDNLIVPGGV : MS+QGKK+IPRITSDRLLI+GGRIVNDDQSFYAD+++EDGLIKQIG+NLIVPGG+ : MSFQGKKSIPRITSDRLLIRGGRIVNDDQSFYADVHVEDGLIKQIGENLIVPGGI	1-55 1-55
	: KTIEANGKMVIPGGIDVHTHFQMPYKGMTTVDDFFQGTKAALAGGTTMIIDHVVP : KTI+A+G MV+PGG+DVHT QMP GMT DDF QGTKAALAGGTTMI+DHV P	56-110
014531	: KTIDAHGLMVLPGGVDVHTRLQMPVLGMTPADDFCQGTKAALAGGTTMILDHVFP	56-110
	: EPESSLTEAYEKWREWADGKSCCDYALHVDITHWNDSVKQEVQNLIKDKGVNSFM : + SL AYE+WRE AD +CCDY+LHVDIT W++S+K+E++ L+K+KGVNSF+	111-165
014531	: DTGVSLLAAYEQWRERADSAACCDYSLHVDITRWHESIKEELEALVKEKGVNSFL	111-165
Query	: VYMAYKDLYQVSNTELYEIFTCLGELGAIAQVHAENGDIIAQEQTRMLEMGITGP : V+MAYKD Q S++++YEIF+ + +LGA+AQVHAENGDI+ +EQ R+LE+GITGP	166-220
014531	: VFMAYKDRCQCSDSQMYEIFSIIRDLGALAQVHAENGDIVEEEQKRLLELGITGP	166-220
Query	: EGHVLSRPEELEAEAVFRAITIASQTNCPLYVTKVMSKSAADLISQARKKGNVVF : EGHVLS PEE+EAEAV+RA+TIA Q NCPLYVTKVMSK AAD I+QA+++G VVF	221-275
014531	: EGHVLSHPEEVEAEAVYRAVTIAKQANCPLYVTKVMSKGAADAIAQAKRRGVVVF	221-275
Query	: GEPITASLGIDGTHYWSKNWAKAAAFVTSPPLSPDPTTPDYINSLLASGDLQLSG : GEPITASLG DG+HYWSKNWAKAAAFVTSPP++PDPTT D++ LL+SGDLQ++G	276-330
014531	: GEPITASLGTDGSHYWSKNWAKAAAFVTSPPVNPDPTTADHLTCLLSSGDLQVTG	276-330
Query	: SAHCTFSTAQKAIGKDNFTAIPEGTNGVEERMSVIWDKAVATGKMDENQFVAVTS : SAHCTF+TAQKA+GKDNF IPEGTNG+EERMS++W+K VA+GKMDEN+FVAVTS	331-385
014531	: SAHCTFTTAQKAVGKDNFALIPEGTNGIEERMSMVWEKCVASGKMDENEFVAVTS	331-385
Query	: TNAAKIFNLYPRKGRISVGSDSDLVIWDPDAVKIVSAKNHQSAAEYNIFEGMELR : TNAAKIFN YPRKGR++VGSD+DLVIW+P A KI+SAK H EYNIFEG+E R	386-440
014531	: TNAAKIFNFYPRKGRVAVGSDADLVIWNPKATKIISAKTHNLNVEYNIFEGVECR	386-440
Query	: GAPLVVICQGKIMLEDGNLHVTQGAGRFIPCSPFSDYVYKRIKARRKMADLHAVP : GAP VVI QG++ LEDG + VT GAGRF+P F D+VYKRIKAR ++A++H VP	441-495
014531	: GAPAVVISQGRVALEDGKMFVTPGAGRFVPRKTFPDFVYKRIKARNRLAEIHGVP	441-495
-	: RGMYDGPVFDLTTTPKGGTPAGSARGSPTRPN-PPVRNLHQSGFSLSGTQVDEGV : RG+YDGPV ++ K G+ A + P + + PPVRNLHQSGFSLSG+Q D+ +	496-549
	: RGLYDGPVHEVMVPAKPGSGAPARASCPGKISVPPVRNLHQSGFSLSGSQADDHI	496-550
-	: -RSASKRIVAPPGGRSNITSLS 550-570 : R +++1+APPGGRSNITSLS	
	: ARRTAQKIMAPPGGRSNITSLS 551-572	