241 common elements in DUM4 VS R1 and DUM4 VS R2:

Gene Name	Protein Name
DUM4	Double homodox protein 4
HNRNPU	Heterogeneous nuclear ribonucleoprotein U
EDC4	Enhancer of mRNA-decapping protein 4
MATR3	Matrin-3
SFPQ	Splicing factor, proline- and glutamine-rich
DHX9	ATP-dependent RNA helicase A
HNRNPA3	Heterogeneous nuclear ribonucleoprotein A3
PRKDC	DNA-dependent protein kinase catalytic subunit
XRCC5	X-ray repair cross-complementing protein 5
MCM7	DNA replication licensing factor MCM7
XRCC6	X-ray repair cross-complementing protein 6
NONO	Non-POU domain-containing octamer-binding protein
TRIM28	Transcription intermediary factor 1-beta
NPM1	Nucleophosmin
HNRNPL	Heterogeneous nuclear ribonucleoprotein L
KHSRP	Far upstream element-binding protein 2
SRSF3	Serine/arginine-rich splicing factor 3
HNRNPD	Heterogeneous nuclear ribonucleoprotein D0
KHDRBS1	KH domain-containing, RNA-binding, signal transduction-associated protein 1
ILF3	Interleukin enhancer-binding factor 3
HNRGB1	High mobility group protein B1
HNRNPF	Heterogeneous nuclear ribonucleoprotein F
HNRNPH3	Heterogeneous nuclear ribonucleoprotein H3
DDX5	Probable ATP-dependent RNA helicase DDX5
DDX17	Probable ATP-dependent RNA helicase DDX17
PABP1	Poly (ADP-ribose) polymerase 1
DBT	Lipoamide acyltransferase component of branched-chain alpha-keto acid dehydrogenase complex, mitochondrial
HNRNPAB	Heterogeneous nuclear ribonucleoprotein A/B
NCL	Nucleolin
SNRNP70	U1 small nuclear ribonucleoprotein 70 kDa
ILF2	Interleukin enhancer-binding factor 2
SRSF1	Serine/arginine-rich splicing factor 1
FUBP1	Far upstream element-binding protein 1
ASS1	Argininosuccinate synthase
ACLY	ATP-citrate synthase
DHX15	Pre-mRNA-splicing factor ATP-dependent RNA helicase DHX15
RALY	RNA-binding protein Raly
GBE1	1,4-alpha-glucan-branching enzyme
RPS13	40S ribosomal protein S13
SYNCRIP	Heterogeneous nuclear ribonucleoprotein Q
RECQL	ATP-dependent DNA helicase Q1
SNRNP200	U5 small nuclear ribonucleoprotein 200 kDa helicase
RPL5	60S ribosomal protein L5
SERBP1	Plasminogen activator inhibitor 1 RNA-binding protein
RPS7	40S ribosomal protein S7
SF3B2	Splicing factor 3B subunit 2
HMGB2	High mobility group protein B2
CLIC4	Chloride intracellular channel protein 4
EDC3	Enhancer of mRNA-decapping protein 3
BCKDHA	2-oxoisovalerate dehydrogenase subunit alpha, mitochondrial
PRPF8	Pre-mRNA-processing-splicing factor 8
SRSF7	Serine/arginine-rich splicing factor 7
THRAP3	Thyroid hormone receptor-associated protein 3
DCP1A	mRNA-decapping enzyme 1A
PRPF19	Pre-mRNA-processing factor 19
DNAJB4	Dnaj homolog subfamily B member 4
ELAVL1	ELAV-like protein 1
IFI16	Gamma-interferon-inducible protein 16
SRSF2	Serine/arginine-rich splicing factor 2
ALYREF	THO complex subunit 4
USO1	General vesicular transport factor p115
RPS27A	Ubiquitin-40S ribosomal protein S27a
SRSF6	Serine/arginine-rich splicing factor 6
CCT7	T-complex protein 1 subunit eta
HMGN2	Non-histone chromosomal protein HMG-17
HNRNPDL	Heterogeneous nuclear ribonucleoprotein D-like
NCL	Nucleolin (Fragment)
RPL10	60S ribosomal protein L10
EIF4A3	Eukaryotic initiation factor 4A-III
TRA2B	Transformer-2 protein homolog beta
NUMA1	Nuclear mitotic apparatus protein 1
DDX6	Probable ATP-dependent RNA helicase DDX6
RPN1	Dolichyl-diphosphooligosaccharide--protein glycosyltransferase subunit 1
RPL35	60S ribosomal protein L35
CSE1L	Exportin-2
RBM14	RNA-binding protein 14
SUPT16H	FACT complex subunit SPT16
HNRNPUL2	Heterogeneous nuclear ribonucleoprotein U-like protein 2
MCM3	DNA replication licensing factor MCM3
EWSR1	RNA-binding protein EWS
ERH	Enhancer of rudimentary homolog
TKT	Transketolase
PCBP1	Poly(rC)-binding protein 1
COPA	Coatomer subunit alpha
SF3B1	Splicing factor 3B subunit 1
HNRNPA0	Heterogeneous nuclear ribonucleoprotein A0
SSB	Lupus La protein
MCM6	DNA replication licensing factor MCM6
SMC1A	Structural maintenance of chromosomes protein 1A
SRRT	Serrate RNA effector molecule homolog
RPS26	40S ribosomal protein S26
TOP1	DNA topoisomerase I
RPA1	Replication protein A 70 kDa DNA-binding subunit
CCT5	T-complex protein 1 subunit epsilon
RPL27	60S ribosomal protein L27
TPI1	Triosephosphate isomerase
PNA	Protein PNA
CORO1C	Coronin-1C
PRDX6	Peroxiredoxin-6
H2AFZ	Histone H2A.Z
BUB3	Mitotic checkpoint protein BUB3
UBA1	Ubiquitin-like modifier-activating enzyme 1
FKBP5	Peptidyl-prolyl cis-trans isomerase FKBP5
APOE1	DNA (purinic or apyrimidinic site) lyase
TARDBP	TAR DNA-binding protein 43
FUS	RNA-binding protein FUS
SRRM2	Serine/arginine repetitive matrix protein 2
RPL28	60S ribosomal protein L28
EFTUD2	116 kDa U5 small nuclear ribonucleoprotein component
SAFB2	SAF domain-containing ribonucleoprotein
MCM5	DNA replication licensing factor MCM5
SF3B3	Splicing factor 3B subunit 3
RPL21	60S ribosomal protein L21
TAF15	TATA binding protein-associated factor 2N
SAFB	Scaffold attachment factor B1
HNRNPUL1	Heterogeneous nuclear ribonucleoprotein U-like protein 1
IFIT3	Interferon-induced protein with tetratricopeptide repeats 3
PTBP1	Polypyrimidine tract-binding protein 1
TRIMT2	Tripartite motif-containing protein 72
MCM2	DNA replication licensing factor MCM2
CDC5L	Cell division cycle 5-like protein
RNH1	Ribonuclease inhibitor
RUVBL2	Ruvb-like 2
KPNB1	Importin subunit beta-1
RBM39	RNA-binding protein 39
FEN1	Flap endonuclease 1
AHCY	Adenosylhomocysteinase
PGD	6-phosphogluconate dehydrogenase, decarboxylating
RPL23	60S ribosomal protein L23
SNRPD2	Small nuclear ribonucleoprotein Sm D2
SUB1	Activated RNA polymerase II transcriptional coactivator p15
SF1	Splicing factor 1
RPL17	60S ribosomal protein L17
HIST1H1E	Histone H1.4
U2AF1L5	Splicing factor U2AF 35 kDa subunit-like protein
NUDT21	Cleavage and polyadenylation specificity factor subunit 5
PSPC1	Paraspeckle component 1
RTCB	tRNA-splicing ligase RtcB homolog
RPL34	60S ribosomal protein L34
RSL1D1	Ribosomal L1 domain-containing protein 1
CCAR2	Cell cycle and apoptosis regulator protein 2
FUBP3	Far upstream element-binding protein 3
RPS24	40S ribosomal protein S24
CPSF6	Cleavage and polyadenylation specificity factor subunit 6
LUC7L2	Putative RNA-binding protein Luc7-like 2
ATPIF1	ATPase inhibitor, mitochondrial
DDX39A	ATP-dependent RNA helicase DDX39A (Fragment)
RPL24	60S ribosomal protein L24
RBMX	RNA-binding motif protein, X chromosome
CDKN2A	Cyclin-dependent kinase inhibitor 2A
SF3A3	Splicing factor 3A subunit 3
SUMO2	Small ubiquitin-related modifier 2
PRPF40A	Pre-mRNA-processing factor 40 homolog A
HMGN1	Non-histone chromosomal protein HMG-14
CBX3	Chromobox protein homolog 3
CHTOP	Chromatin target of PRMT1 protein
SETSIP	Protein SETSIP
RPL7A	60S ribosomal protein L7a
RPLP0	60S acidic ribosomal protein P0
DDX39B	Spliceosome RNA helicase DDX39B
SSRP1	FACT complex subunit SSRP1
CPSF7	Cleavage and polyadenylation specificity factor subunit 7
PSMD2	26S proteasome non-ATPase regulatory subunit 2
GTF2I	General transcription factor II-I
GTF2F1	General transcription factor IIF subunit 1
RPS28	40S ribosomal protein S28
MCM4	DNA replication licensing factor MCM4
ZNF326	DBIRD complex subunit ZNF326
REFLAB	Ret finger protein-like 4B
PRMT1	Protein arginine N-methyltransferase 1
SRSF9	Serine/arginine-rich splicing factor 9
RPS23	40S ribosomal protein S23
RPS15	40S ribosomal protein S15
LGALS1	Galectin-1
SRSF10	Serine/arginine-rich splicing factor 10
PABPN1	Polyadenylate-binding protein 2
ZNF217	Zinc finger protein 217
DAZAP1	DAZ-associated protein 1
MAP4	Microtubule-associated protein
HIST2H3PS2	Histone H3
RPL29	60S ribosomal protein L29
HIST2H2AB	Histone H2A type 2-B
FBL	rRNA 2'-O-methyltransferase fibrillarin
DDX21	Nucleolar RNA helicase 2
RUVBL1	Ruvb-like 1
SRSF4	Serine/arginine-rich splicing factor 4
RPS15A	40S ribosomal protein S15a
YBX3	Y-box-binding protein 3
RBBP7	Histone-binding protein RBBP7
PA2G4	Proliferation-associated protein 2G4
SF3B6	Splicing factor 3B subunit 6
RUVBL1	Ruvb-like helicase (Fragment)
HNRNPL1	Heterogeneous nuclear ribonucleoprotein L-like
GPI	Glucose-6-phosphate isomerase
DDX1	ATP-dependent RNA helicase DDX1
H2AFY	Core histone macro-H2A.1
LMNB1	Lamin-B1
HNRNPM	Heterogeneous nuclear ribonucleoprotein M (Fragment)
RPL13A	60S ribosomal protein L13a
FUBP1	Far upstream element-binding protein 1 (Fragment)
HNRNPR	Heterogeneous nuclear ribonucleoprotein R
LMNB2	Lamin-B2
RBBP4	Histone-binding protein RBBP4
SUMO4	Small ubiquitin-related modifier 4
KRT75	Keratin, type II cytoskeletal 75
PABPC1	Polyadenylate-binding protein
H3F3C	Histone H3.3C
DDX1	ATP-dependent RNA helicase DDX1
ARPC4	Actin-related protein 2/3 complex subunit 4
SLC25A6	ADP/ATP translocase 3
DDX39A	ATP-dependent RNA helicase DDX39A
HDAC1	Histone deacetylase 1
NAP1L1	Nucleosome assembly protein 1-like 1 (Fragment)
HDAC2	Histone deacetylase 2
DUX1	Double homodox protein 1
KRT28	Keratin, type I cytoskeletal 28
SLC25A4	ADP/ATP translocase 1
MAP4	Microtubule-associated protein (Fragment)
NAP1L1	Nucleosome assembly protein 1-like 1
DDX3X	ATP-dependent RNA helicase DDX3X (Fragment)
BCLAF1	Bcl-2-associated transcription factor 1
HNRNPA1	Heterogeneous nuclear ribonucleoprotein A1 (Fragment)
RPL26L1	60S ribosomal protein L26-like 1
RBMXL2	RNA-binding motif protein, X-linked-like 2
BCLAF1	Bcl-2-associated transcription factor 1
BCKDHA	2-oxoisovalerate dehydrogenase subunit alpha, mitochondrial (Fragment)
KRT79	Keratin, type II cytoskeletal 79
HIST1H1T	Histone H1t
ARPC4-TTLL3	Protein ARPC4-TTLL3
EFTUD2	116 kDa U5 small nuclear ribonucleoprotein component (Fragment)
CLTCL1	Clathrin heavy chain 2
RPS11	40S ribosomal protein S11
ILF3	Interleukin enhancer-binding factor 3 (Fragment)
PPIA	Peptidyl-prolyl cis-trans isomerase A
PABPC1	Polyadenylate-binding protein 1
PTBP1	Polypyrimidine tract-binding protein 1, isoform CRA_b
RPL7A	60S ribosomal protein L7a (Fragment)
RBMXL1	RNA-binding motif protein, X-linked-like-1
HNRNPA1L2	Heterogeneous nuclear ribonucleoprotein A1-like 2
RBMXL3	RNA-binding motif protein, X-linked-like-3
NONO	Non-POU domain-containing octamer-binding protein (Fragment)

45 elements included exclusively in DUM4 VS R1:

Gene Name	Protein Name
VCP	Transitional endoplasmic reticulum ATPase
S100A6	Protein S100-A6
RPL19	60S ribosomal protein L19
PACS	Multifunctional protein ADE2
LASP1	LIM and SH3 domain protein 1
RPL22	60S ribosomal protein L22
XRN2	5'-3' exoribonuclease 2
TRA2A	Transformer-2 protein homolog alpha
DNAJA1	Dnaj homolog subfamily A member 1
PPP2R1A	Serine/threonine-protein phosphatase 2A 65 kDa regulatory subunit A alpha isoform
ACTB2	Actin-related protein 2
STAT1	Signal transducer and activator of transcription 1-alpha/beta
SBDS	Ribosome maturation protein SBDS
RPL38	60S ribosomal protein L38
KRT4	Keratin, type II cytoskeletal 4
SNRPD1	Small nuclear ribonucleoprotein Sm D1
PUF60	Poly(U)-binding-splicing factor PUF60 (Fragment)
RPN2	Dolichyl-diphosphooligosaccharide--protein glycosyltransferase subunit 2
COPG1	Coatomer subunit gamma-1
CDK4	Cyclin-dependent kinase 4
CAPZA1	F-actin-capping protein subunit alpha-1
IPO5	Importin-5
POLDIP3	Polymerase delta-interacting protein 3
S100A11	Protein S100-A11
CBX5	Chromobox protein homolog 5
FKBP1A	Peptidyl-prolyl cis-trans isomerase FKBP1A
NSUN2	tRNA (cytosine(34)-C(5))-methyltransferase
RBMB4	RNA-binding protein 8A
NOP58	Nucleolar protein 58
KRT26	Keratin, type I cytoskeletal 26
GMPS	GMP synthase [glutamine-hydrolyzing]
RPS5	40S ribosomal protein S5
PSMC5	26S protease regulatory subunit 8
CMPK1	UMP-CMP kinase
RANBP2	E3 SUMO-protein ligase RanBP2
GTF2B	Transcription initiation factor IIB
RAB10	Ras-related protein Rab-10
DUX4	Double homodox protein 4
GPI	Glucose-6-phosphate isomerase (Fragment)
SAFB2	Scaffold attachment factor B2
PABPC1	Polyadenylate-binding protein 1 (Fragment)
KRT15	Keratin, type I cytoskeletal 15
KRT13	Keratin, type I cytoskeletal 13
RACK1	Receptor of activated protein C kinase 1 (Fragment)
KRT74	Keratin, type I cytoskeletal 74

27 elements included exclusively in DUM4 VS R2:

Gene Name	Protein Name
FLNB	Filamin-B
TUFM	Elongation factor Tu, mitochondrial
MTHFD1	C-1-tetrahydrofolate synthase, cytoplasmic
HAT1	Histone acetyltransferase type B catalytic subunit
RBBP6	E3 ubiquitin-protein ligase RBBP6
SAP18	Histone deacetylase complex subunit SAP18
CRYAB	Alpha-crystallin B chain
PRPF6	Pre-mRNA-processing factor 6
U2AF2	Splicing factor U2AF 65 kDa subunit
UQCRC2	Cytochrome b-c1 complex subunit 2, mitochondrial
DCP1B	mRNA-decapping enzyme 1B
DNAJC8	Dnaj homolog subfamily C member 8
HDGF	Hepatoma-derived growth factor
SRSF11	Serine/arginine-rich splicing factor 11
UGDH	UDP-glucose 6-dehydrogenase
SNRPE	U1 small nuclear ribonucleoprotein A
ACIN1	Apoptotic chromatin condensation inducer in the nucleus
TBCB	Tubulin-folding cofactor B
BANF1	Barrier-to-autointegration factor
ALDOC	Fructose-bisphosphate aldolase C
CHD4	Chromodomain-helicase-DNA-binding protein 4
SF3A2	Splicing factor 3A subunit 2
PRDX2	Peroxiredoxin-2
ALB	Serum albumin
RPL13a	60S ribosomal protein L13a
ACIN1	Apoptotic chromatin condensation inducer in the nucleus (Fragment)
KHDRBS2	KH domain-containing, RNA-binding, signal transduction-associated protein 2