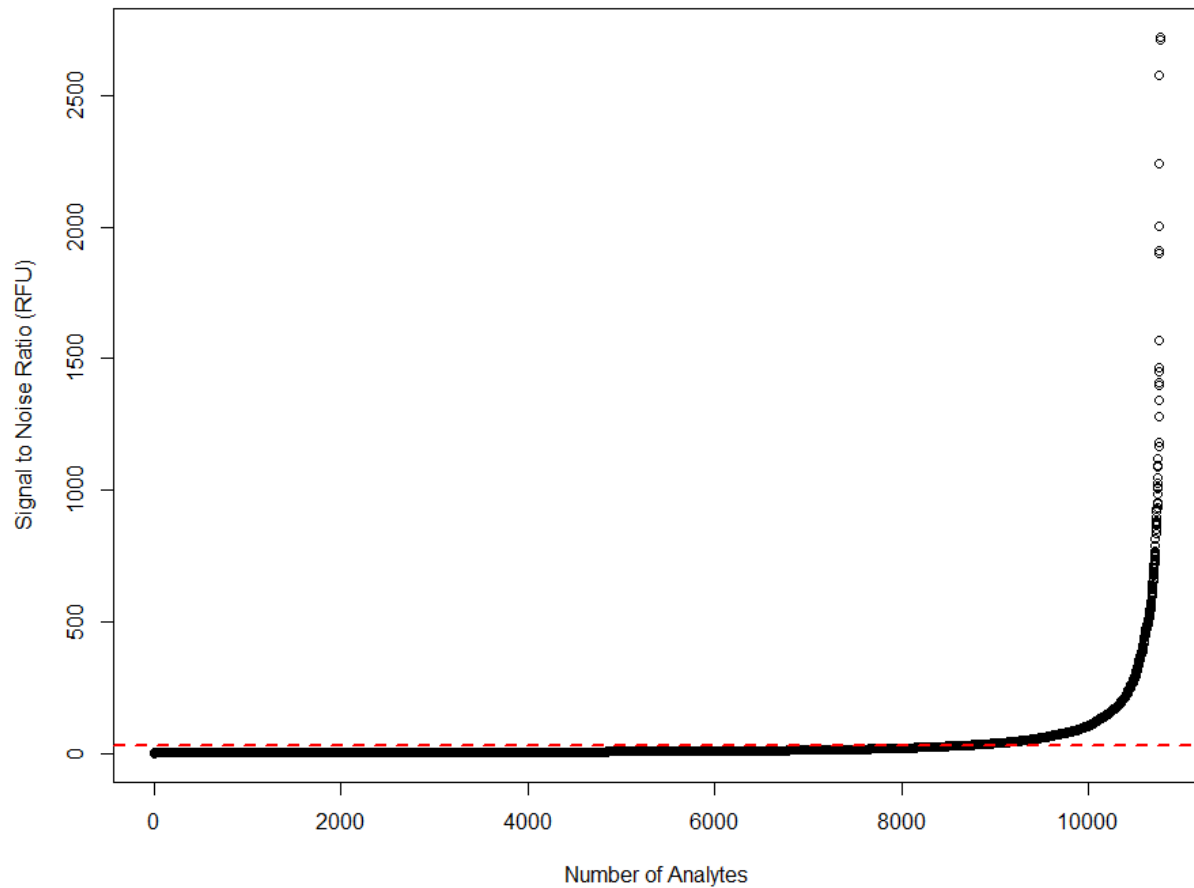
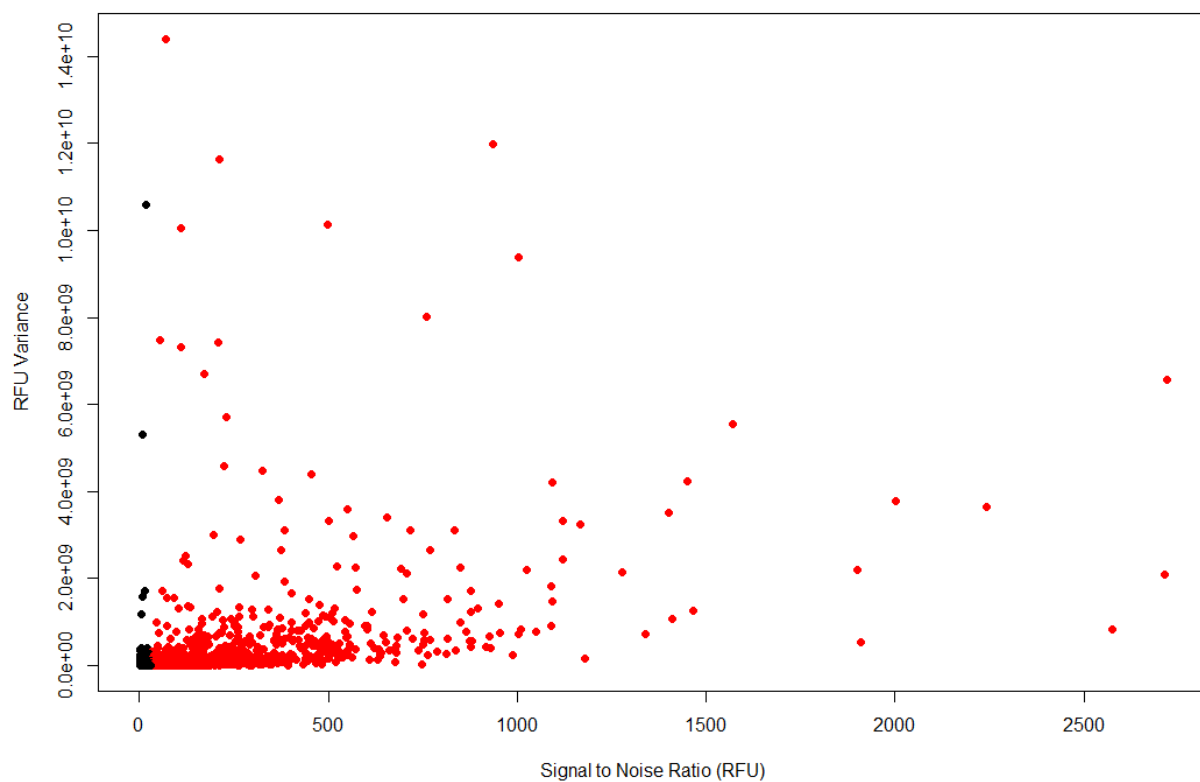


Supplemental Figures



Supplemental Figure 1: Plot of the signal to noise parameter vs relative fluorescence units of the protein analytes. The curve shows an inflection point around a signal to noise ratio of 31.8, where the curve increases dramatically, and results in 2006 analytes with a signal to noise ratio > 31.8.



Supplemental Figure 2: Plot of the calculated variance versus signal to noise ratio. The red color marker indicates the 2,006 analytes with signal to noise ratio values above 31.8, the inflection point depicted in Supplemental Figure 1.

Aptamer Name	Target	Entrez Gene Symbol	FDR	log2FC
seq.29660.153	Isocitrate dehydrogenase [NAD] subunit alpha, mitochondrial	IDH3A	0.0604733	-1.212492
seq.10575.31	Poly(U)-binding-splicing factor PUF60	PUF60	0.0604733	-0.579354
seq.19195.85	40S ribosomal protein S5	RPS5	0.0604733	-0.64865
seq.3325.2	Matrilin-2	MATN2	0.0604733	0.3078188
seq.31440.109	Doublecortin domain-containing protein 2	DCDC2	0.0604733	-0.5859
seq.33622.23	Zinc finger protein 394	ZNF394	0.0604733	-0.854455
seq.20217.26	Lamin-B2	LMNB2	0.0604733	-1.277159
seq.30977.31	Enhancer of mRNA-decapping protein 3	EDC3	0.0604733	-0.724611
seq.30274.3	U4/U6.U5 tri-snRNP-associated protein 2	USP39	0.0604733	-1.579421
seq.19124.9	Ubiquitin-like domain-containing CTD phosphatase 1	UBLCP1	0.0604733	-0.477062
seq.20999.12	60S ribosomal protein L5	RPL5	0.0604733	-1.010006
seq.19808.26	Ras-related protein Rab-3D	RAB3D	0.0604733	-0.816341
seq.9758.17	40S ribosomal protein S4, X isoform	RPS4X	0.0604733	-0.777589
seq.30501.60	GTP-binding protein Rit1	RIT1	0.0604733	-0.892728
seq.7113.1	GrpE protein homolog 1, mitochondrial	GRPEL1	0.0604733	-0.491573
seq.33170.45	Tetratricopeptide repeat protein 23-like	TTC23L	0.0604733	-0.680107
seq.20960.47	Far upstream element-binding protein 1	FUBP1	0.0604733	-0.499944
seq.13940.19	Gamma-interferon-inducible protein 16:Isoform 2, Hematopoietic expression, interferon-inducible nature, and nuclear localization 1	IFI16	0.0604733	-1.320821
seq.23694.3	Asparagine synthetase	ASNS	0.0604733	0.3618345
seq.21387.64	Meprin A subunit alpha	MEP1A	0.0604733	-1.074175
seq.8265.225	Lamina-associated polypeptide 2, isoforms beta/gamma	TMPO	0.0604733	-0.899581
seq.28164.82	Outer dense fiber protein 3-like protein 2	ODF3L2	0.0604733	-1.065512
seq.2925.9	Plasminogen activator inhibitor 1	SERPINE1	0.0604733	-0.210774
seq.16857.2	Ras-related protein Rab-2A	RAB2A	0.0604733	-0.557741
seq.31035.50	Protein spire homolog 2	SPIRE2	0.0604733	-0.804764
seq.29250.39	BRG1-associated factor 170	SMARCC2	0.0604733	-1.264628
seq.31015.10	Protein phosphatase 1K, mitochondrial	PPM1K	0.0604733	-2.059167
seq.31932.34	Keratinocyte-associated protein 3	KRTCAP3	0.0604733	-0.368416
seq.12478.15	60S ribosomal protein L30	RPL30	0.0604733	-0.779151

seq.29504.25	Mesencephalic astrocyte-derived neurotrophic factor	MANF	0.0604733	-0.258117
seq.9339.204	Peptidyl-prolyl cis-trans isomerase FKBP2	FKBP2	0.0604733	-0.287633
seq.24671.15	Apoptosis-associated speck-like protein containing a CARD	PYCARD	0.0604733	-0.22847
seq.7832.181	Protein disulfide-isomerase A3	PDIA3	0.0604733	-0.417827
seq.4414.69	Pulmonary surfactant-associated protein D	SFTPD	0.0604733	-1.563344
seq.20433.19	39S ribosomal protein L1, mitochondrial	MRPL1	0.0604733	-0.677619
seq.10627.87	Amyloid-like protein 2	APLP2	0.0604733	-0.428488
seq.19121.3	Ubiquilin-2	UBQLN2	0.0604733	-0.219644
seq.20137.49	Heterogeneous nuclear ribonucleoprotein A1	HNRNPA1	0.0604733	-1.186569
seq.31412.22	Fas-activated serine/threonine kinase	FASTK	0.0604733	-1.175989
seq.6393.63	Endoplasmic	HSP90B1	0.0604733	-0.471026
seq.25048.30	Protein kinase C and casein kinase substrate in neurons protein 2	PACSIN2	0.0604733	-0.413275
seq.21583.14	60S ribosomal protein L26-like 1	RPL26L1	0.0604733	-0.694338
seq.19236.24	Activated RNA polymerase II transcriptional coactivator p15	SUB1	0.0604733	-1.348913
seq.25219.17	V-type proton ATPase subunit F	ATP6V1F	0.0604733	-0.50372
seq.9753.17	Ezrin	EZR	0.0604733	-0.229241
seq.33227.149	Protein FAM161A	FAM161A	0.0604733	-1.714632
seq.15435.4	Purine nucleoside phosphorylase	PNP	0.0604733	-0.55272
seq.9545.156	Granzyme K	GZMK	0.0604733	-1.173976
seq.26209.2	Splicing factor, arginine/serine-rich 1	SRSF1	0.0604733	-0.99152
seq.19169.88	Acidic fibroblast growth factor intracellular-binding protein	FIBP	0.0604733	-0.370558
seq.23243.120	40S ribosomal protein S25	RPS25	0.0604733	-0.33538
seq.17176.13	PC4 and SFRS1-interacting protein	PSIP1	0.0604733	-0.504228
seq.23366.15	Ubiquitin-like protein 7	UBL7	0.0604733	-0.360707
seq.31106.18	Cdc42 effector protein 3	CDC42EP3	0.0604733	-1.989699
seq.12709.63	Histone H1x	H1-10	0.0604733	-1.383834
seq.5687.5	Glucosidase 2 subunit beta	PRKCSH	0.0604733	-0.15956
seq.9004.24	Low-density lipoprotein receptor class A domain-containing protein 4	LDLRAD4	0.0604733	-0.643814
seq.23601.43	Acyl-coenzyme A thioesterase 12	ACOT12	0.0604733	-0.377842
seq.32648.65	ATP-dependent RNA helicase DDX55	DDX55	0.0604733	-0.578023
seq.31362.50	DNA-binding protein A	YBX3	0.0604733	-1.296323
seq.21891.31	Fibulin-7	FBLN7	0.0604733	0.2501456
seq.9169.14	Small ubiquitin-related modifier 3	SUMO3	0.0604733	-0.320931

seq.31447.34	High mobility group protein B1	HMGB1	0.0604733	-0.8725
seq.15331.47	Histone-binding protein RBBP4	RBBP4	0.0604733	-1.067952
seq.6294.11	B melanoma antigen 2	BAGE2	0.0604733	-0.65495