

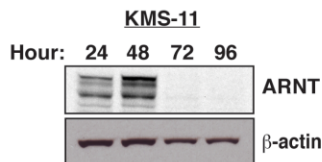
Aryl hydrocarbon receptor nuclear translocator (ARNT) isoforms control lymphoid cancer cell proliferation through differentially regulating tumor suppressor p53 activity

Supplementary Material

A

SAMPLE	LOCUS	COPY NUMBER
ANBL6	ARNT	2.180088282
ARP1	ARNT	4.577002048
CAG	ARNT	5.570586205
DELTA47	ARNT	5.709896564
EJM	ARNT	2.310377598
FLAM76	ARNT	2.126859426
FR4	ARNT	4.735713959
H1112	ARNT	2.823943138
INA6	ARNT	2.428283453
JIM3	ARNT	8.066644669
JUN3	ARNT	3.354818106
JK6L	ARNT	4.207172871
KARPAS620	ARNT	2.560871601
KHM11	ARNT	5.286267757
KHM1B	ARNT	7.544189453
KMM1	ARNT	2.841897726
KMS11	ARNT	3.987119675
KMS12BM	ARNT	2.827967167
KMS12PE	ARNT	3.253892899
KMS18	ARNT	3.421411276
KMS20	ARNT	6.815284252
KMS26	ARNT	2.981743097
KMS28BM	ARNT	3.274240494
KMS28PE	ARNT	3.511126518
KMS34	ARNT	2.48257041
L363	ARNT	2.905746937
LP1	ARNT	4.724547863
MM1R	ARNT	3.193591356
MM1S	ARNT	3.315104723
MM_M1	ARNT	4.242246628
NCIH929	ARNT	4.868062496
OCIMY1	ARNT	2.045366049
OCIMY5	ARNT	1.985526204
OCIMY7	ARNT	3.692774534
OPM1	ARNT	3.624837637
OPM2	ARNT	5.21121788
PE1	ARNT	2.668722868
PE2	ARNT	2.939680099
RPMI8226	ARNT	3.811626434
SACHI	ARNT	2.053567886
SKMM1	ARNT	4.144442558
SKMM2	ARNT	2.115360737
U266	ARNT	3.01539278
UTMC2	ARNT	3.401702642
XG1	ARNT	2.899944782
XG2	ARNT	2.990574598
XG6	ARNT	3.940377474
XG7	ARNT	5.152966022

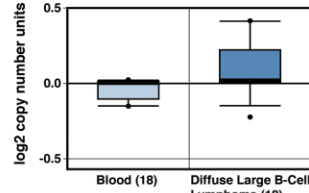
B



C

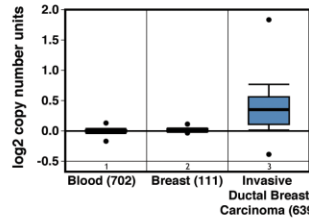
ARNT Copy Number in TCGA Lymphoma Diffuse Large B-Cell Lymphoma vs. Normal

Copy Number P-value: 0.019
Gain Gene Rank: 290 (in top 2%) t-Test: 2.203
Reporter: 01-149082309 Fold Change: 1.075



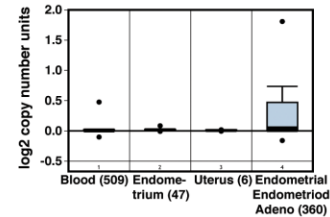
ARNT Copy Number in TCGA Breast 2 Invasive Ductal Breast Carcinoma vs. Normal

Copy Number P-value: 1.34E-124
Gain Gene Rank: 574 (in top 4%) t-Test: 29.904
Reporter: 01-149082309 Fold Change: 1.288



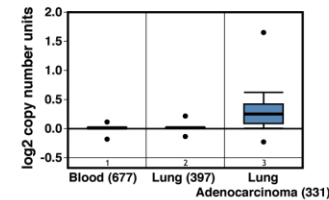
ARNT Copy Number in TCGA Uterus 2 Endometrial Endometrioid Adenocarcinoma vs. Normal

Copy Number P-value: 2.80E-37
Gain Gene Rank: 81 (in top 1%) t-Test: 14.269
Reporter: 01-149082309 Fold Change: 1.174

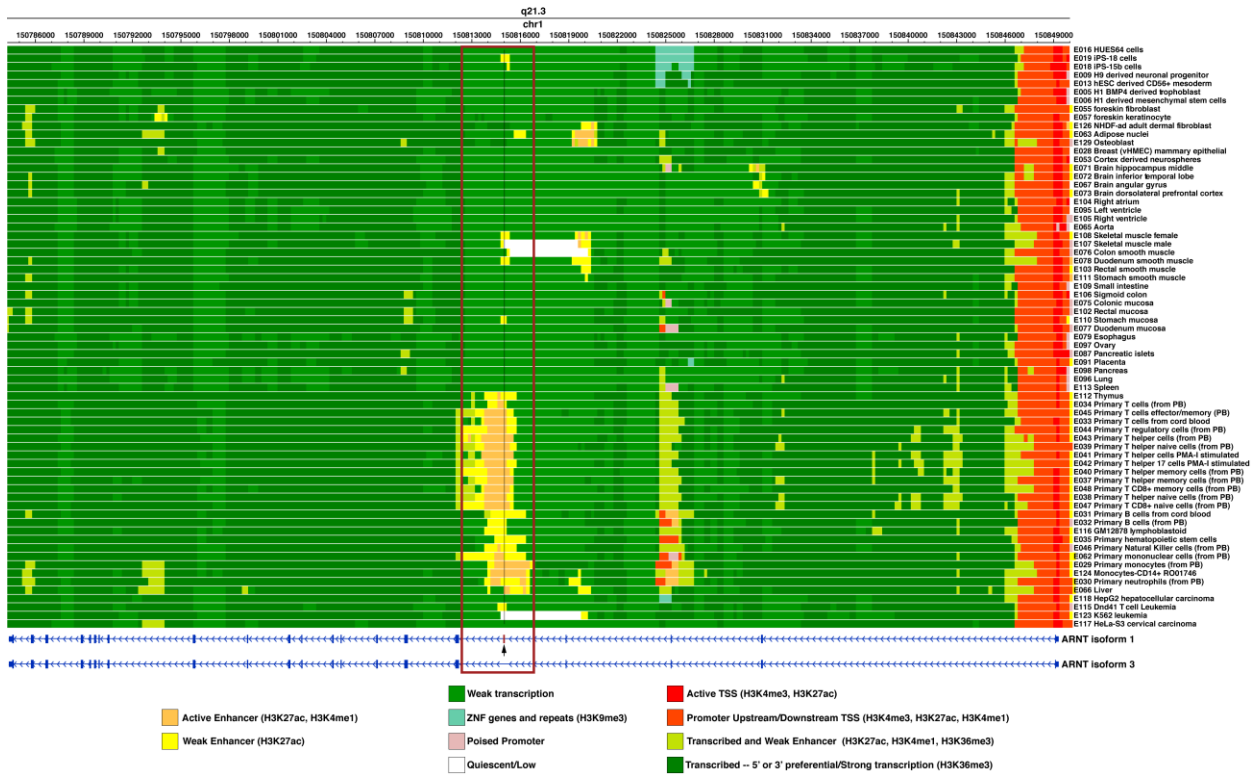


ARNT Copy Number in TCGA Lung 2 Lung Adenocarcinoma vs. Normal

Copy Number P-value: 1.26E-52
Gain Gene Rank: 611 (in top 4%) t-Test: 18.336
Reporter: 01-149082309 Fold Change: 1.207



Supplemental Figure 1: Shown in this figure is expanded ARNT copy number analysis of human myeloma cell lines and OncoPrint analysis of ARNT copy number in various cancer types.



Supplemental Figure 2: Epigenomic profiles of the ARNT locus obtained from data sets from the NIH Roadmap Epigenomics Consortium, indicating a unique difference between histone modifications between primary lymphoid cells and cancer cells.