ACC 0.28 0.04 0.13 **APS** 0.5 0 0.14 APS7 0.28 0.60 0.03 -0.5 APS_MHC_II 0.16 0.41 0.00 TIS 0.28 0.28 0.41 -0.120.05 0.60 0.12 IIS -0.200.03 0.21 PHBR_I 0.04 0.00 -0.12-0.200.13 0.14 0.16 0.05 0.12 0.21 PHBR_II PHBR_I APS SIT PHBR_II $\overline{\mathbb{S}}$ APS_MHC_II

APS 0.64 0.61 -0.040.03 0.5 0 APS7 0.04 0.66 -0.03-0.5

BLCA

APS_MHC_II 0.05 -0.03

0.07 TIS 0.64 -0.00

0.61	0.66	0.75		1.00	-0.02	0.04	IIS
-0.04	-0.03	-0.03	-0.00	-0.02	1.00	-0.02	PHBR_I

PHBR_II 0.03 0.04 0.05 0.07 0.04 -0.02 PHBR_I PHBR_II APS SIT $\overline{\overline{s}}$ APS_MHC_II

BRCA 0.38 0.42 0.06 0.02 **APS** 0.5 0 APS7 0.52 0.55 0.05 0.07 -0.5 APS_MHC_II 0.52 0.59 0.07 0.00 TIS 0.38 0.52 0.52 0.05 -0.03

0.42 0.55 0.59 0.90 1.00 0.06 -0.03 IIS

0.06 0.05 0.07 0.05 0.06 1.00 -0.14 PHBR_I

-0.03

S

-0.14

PHBR_I

PHBR_II

PHBR_II

0.02

APS

0.07

0.00

APS_MHC_II

-0.03

 SIT

CESC 0.50 0.54 -0.100.01 **APS** 0.5 0 APS7 0.58 0.61 -0.09-0.02-0.5 APS_MHC_II 0.60 0.02 0.07 0.60 TIS 0.50 0.58 0.07 0.12 0.61 0.07 IIS 0.54 0.08 0.03 PHBR_I -0.10-0.090.02 0.07 0.08 0.01 -0.020.07 0.12 0.07 0.03 PHBR_II PHBR_I APS PHBR_II SE S APS_MHC_II

CHOL APS 0.14 0.29 NA NA 0.5 0 NA APS7 0.36 0.41 NA -0.5 APS_MHC_II NA 0.27 0.49 NA NA TIS 0.14 0.36 0.27 NA IIS 0.29 NA 0.41 0.49 NA NA NA PHBR_I NA $\mathsf{N}\mathsf{A}$ NA PHBR_II

PHBR_I APS SIT $\overline{\mathbb{S}}$ PHBR_II APS_MHC_II

COAD APS 0.34 0.34 -0.050.01 0.5 0 APS7 0.44 0.48 -0.10-0.06-0.5APS_MHC_II 0.61 0.64 -0.04-0.01TIS 0.34 0.44 0.61 -0.08-0.05

-0.05

SIT

-0.06

S

0.01

PHBR_I

PHBR_II

PHBR_II

0.01

APS

-0.06

-0.01

APS_MHC_II

DLBC 0.04 0.23 0.23 0.47 **APS** 0.5 0 APS7 0.58 0.38 0.52 -0.080.47

APS_MHC_II 0.58 0.07 0.16 0.23 0.43

-0.5

TIS 0.04 0.38 0.07 -0.300.11

0.23 0.15 IIS 0.52 0.16 -0.29

-0.08PHBR_I 0.23 -0.080.23 -0.30-0.29

0.47 0.47 0.43 0.11 0.15 -0.08PHBR_II

PHBR_I APS PHBR_II SIT S APS_MHC_II

APS 0.32 0.36 NA NA

0.5

0

-0.5

ESCA

NA APS7 0.49 0.53 NA APS_MHC_II NA 0.47 0.51 NA

NA TIS 0.32 0.49 0.47 NA

0.51 NA 0.36 0.53 NA

IIS

NA NA PHBR_I NA NA NA NA NA

NA NA NA NA NA $\mathsf{N}\mathsf{A}$ NA PHBR_II APS

PHBR_I SIT $\overline{\mathbb{S}}$ PHBR_II APS_MHC_II

GBM 0.10 0.40 0.05 -0.01**APS** 0.5 0 APS7 0.19 0.52 0.01 -0.03-0.5 APS_MHC_II -0.020.27 0.59 0.04 TIS 0.10 0.19 0.27 0.67 -0.08-0.100.02 IIS -0.02

-0.02

0.02

S

-0.11

PHBR_I

-0.11

PHBR_II

PHBR_I

PHBR_II

0.40 0.52 0.59

0.01

-0.03

0.04

-0.02

APS_MHC_II

-0.08

-0.10

SE

0.05

-0.01

APS

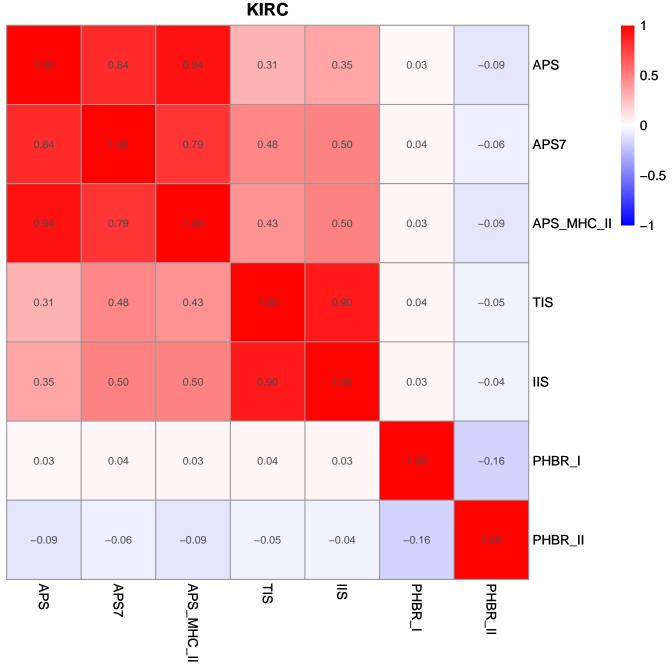
HNSC APS 0.33 0.35 -0.030.06 0.5 0 APS7 0.42 0.45 -0.030.07 -0.5 APS_MHC_II 0.04 0.56 0.60 -0.02

0.33 -0.060.01 TIS 0.42 0.56

IIS	0.02	-0.05	1.00	0.92	0.60	0.45	0.35
PHBR_I	-0.02	1.00	-0.05	-0.06	-0.02	-0.03	-0.03
PHBR_II	1.00	-0.02	0.02	0.01	0.04	0.07	0.06

-0.03	-0.03	-0.02	-0.06	-0.05	1.00	-0.02	PHBR_I
0.06	0.07	0.04	0.01	0.02	-0.02	1.00	PHBR_II
APS	APS7	APS_MHC_II	TIS	S	PHBR_I	PHBR_II	

KICH APS 0.04 0.33 -0.130.04 0.5 0 APS7 0.15 0.46 -0.230.09 -0.5APS_MHC_II 0.65 0.32 0.64 -0.080.24 TIS 0.04 0.15 0.32 -0.040.32 IIS 0.33 0.46 0.64 -0.210.29 -0.03PHBR_I -0.13-0.23-0.08-0.04-0.210.04 0.09 0.24 0.32 0.29 -0.03PHBR_II PHBR_I SIT S PHBR_II APS APS_MHC_II



KIRP APS 0.11 0.37 -0.040.03 0.5 0 APS7 0.26 0.49 -0.03-0.05-0.5APS_MHC_II 0.31 0.60 0.02 -0.01TIS 0.11 0.26 0.31 0.09 -0.13IIS 0.37 0.49 0.60 0.13 -0.08-0.08 PHBR_I -0.04-0.030.02 0.09 0.13 0.03 -0.05-0.01-0.13-0.08-0.08PHBR_II PHBR_I APS PHBR_II SIT S APS_MHC_II

1.00 0.91 0.88 0.02 0.37 -0.04 0.07 APS

0.91 1.00 0.83 0.06 0.43 -0.08 0.03 APS7

0.58

0.03

0.01

S

0.09

0.03

-0.02

PHBR_I

0.5

0

-0.5

TIS

IIS

PHBR_I

PHBR_II

-0.04

0.01

-0.02

PHBR_II

0.91 1.00 0.83 0.06 0.43 -0.08 0.03 APS7

0.88 0.83 1.00 0.05 0.49 -0.05 0.04 APS_MHC_II

0.58

0.09

-0.04

SE

LGG

0.88 0.83 1.00 0.05 0.49

0.05

0.49

-0.05

0.04

APS_MHC_II

0.02

0.37

-0.04

0.07

APS

0.06

0.43

-0.08

0.03

APS 0.33 0.48 -0.01 -0.01

0.5

0

-0.5

LIHC

0.01 APS7 0.38 0.50 -0.07APS_MHC_II

-0.020.51 0.68 0.04

0.09 0.02 0.33 0.38 0.51

TIS IIS 0.48 0.08 -0.000.50

IBR_I

-0.01	-0.07	0.04	0.09	0.08	1.00	-0.15	PHBR_I
-0.01	0.01	-0.02	0.02	-0.00	-0.15		PHBR_II
APS	APS7	APS_MHC_II	TIS	S	PHBR_I	PHBR_II	

0.35

0.33

-0.01

0.03

APS

LUAD

0.35

0.55

0.45

-0.01

-0.01

 SIT

0.33

0.58

0.49

-0.00

0.02

S

-0.01

0.01

0.03

-0.01

-0.00

-0.06

PHBR_I

0.03

0.03

0.02

-0.01

0.02

-0.06

PHBR_II

APS

APS7

TIS

IIS

PHBR_I

PHBR_II

APS_MHC_II

0.45

0.49

0.03

0.02

APS_MHC_II

0.55

0.58

0.01

0.03

0.5

0

-0.5

0.50 0.51

0.65

0.05

0.08

APS_MHC_II

0.09

0.05

 SIT

0.50

0.51

0.04

0.10

APS

0.65

0.66

0.03

0.09

0.65 0.66 0.03 0.09

LUSC

0.10

0.04

S

0.05

0.09

0.10

-0.24

PHBR_I

0.04

0.08

0.05

0.04

-0.24

PHBR_II

0.10

APS

APS7

TIS

IIS

PHBR_I

PHBR_II

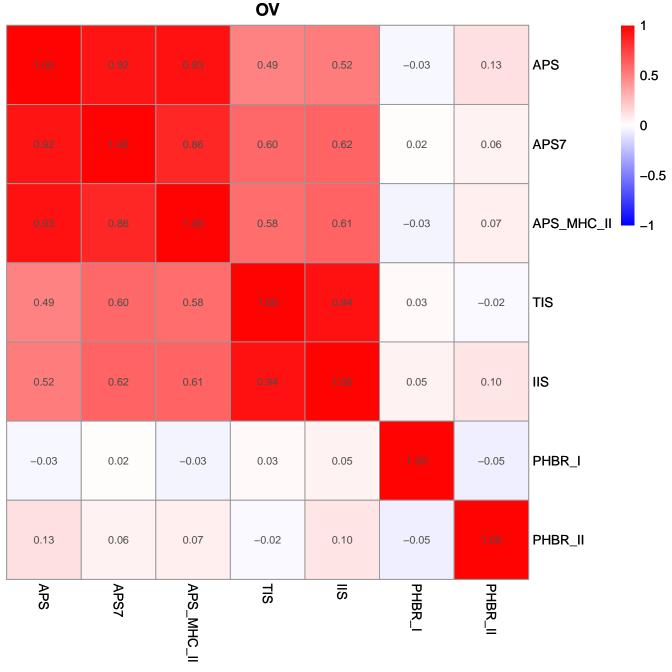
APS_MHC_II

-0.5

0.5

0

MESO APS 0.41 0.48 -0.08-0.12 0.5 0 APS7 0.55 -0.06-0.03-0.5APS_MHC_II 0.54 0.03 -0.16TIS 0.41 0.55 0.54 0.02 0.09 IIS 0.48 0.62 0.60 0.13 0.00 -0.28PHBR_I -0.08-0.060.03 0.02 0.13 -0.12-0.03-0.160.09 0.00 -0.28PHBR_II PHBR_I S PHBR_II APS SE APS_MHC_II



PAAD APS -0.13-0.06-0.080.01 0.5 0 APS7 0.10 0.18 -0.040.08 -0.5APS_MHC_II 0.32 0.41 0.08 0.06 TIS -0.130.10 0.32 0.14 0.11

0.15 0.13 IIS -0.060.18 0.41

-0.08-0.040.08 0.14 0.15 -0.14

PHBR_I 0.01 0.08 0.06 0.11 0.13 -0.14PHBR_II PHBR_I APS PHBR_II SE S APS_MHC_II

PCPG 0.27 0.45 -0.150.10 **APS** 0.5 0 APS7 0.37 0.46 -0.140.04 -0.5 APS_MHC_II 0.35 0.58 -0.130.10 TIS 0.27 0.37 0.35 0.08 0.12 0.10 IIS 0.45 0.46 0.58 -0.04-0.04PHBR_I -0.15-0.14-0.130.08 -0.040.10 0.04 0.10 0.12 0.10 -0.04PHBR_II PHBR_I PHBR_II APS SE S APS_MHC_II

PRAD 0.09 0.22 0.03 0.04 **APS** 0.5 0 APS7 0.34 0.46 0.03 0.03 -0.5 APS_MHC_II 0.27 0.43 0.00 0.04 TIS 0.09 0.34 0.27 0.05 0.02 0.22 0.02 0.05 IIS 0.46 0.43 0.03 0.03 0.02 -0.07PHBR_I 0.00 0.05 0.04 0.03 0.04 0.02 0.05 -0.07PHBR_II

S

 SIT

APS_MHC_II

APS

PHBR_I

READ APS 0.20 0.23 -0.100.15 0.5 0 APS7 0.39 0.46 -0.200.10 -0.5APS_MHC_II 0.44 0.51 -0.150.09 TIS 0.20 0.39 0.44 -0.06-0.00IIS 0.23 0.46 0.51 -0.20-0.01PHBR_I -0.10-0.20-0.15-0.06-0.20-0.160.15 0.10 0.09 -0.00-0.01-0.16PHBR_II PHBR_I PHBR_II APS SIT S APS_MHC_II

SARC 0.57 0.68 -0.09NA **APS** 0.5 0 APS7 0.66 -0.11NA -0.5 APS_MHC_II NA -0.02TIS 0.57 0.66 0.67 0.04 NA NA IIS 0.03 NA PHBR_I -0.09-0.11-0.020.04 0.03 NA NA NA NA NA NA NA PHBR_II PHBR_I APS SE $\overline{\mathbb{S}}$ PHBR_II APS_MHC_II

SKCM 0.61 0.08 0.12 **APS** 0.5 0 0.11 APS7 0.68 0.07 -0.5 APS_MHC_II 0.17 0.07 TIS 0.61 0.01 0.21 0.68 0.23 IIS 0.05 0.01 0.05 0.06 PHBR_I 0.08 0.07 0.07 0.12 0.11 0.17 0.21 0.23 0.06 PHBR_II PHBR_I APS SIT $\overline{\overline{s}}$ PHBR_II APS_MHC_II

APS 0.29 0.27 0.06 -0.15APS7 0.40 0.42 0.05 -0.16

0.5

0

IIS

PHBR_I

PHBR_II

-0.02

-0.06

PHBR_II

0.06

-0.06

PHBR_I

-0.5 APS_MHC_II 0.51 0.50 0.09 -0.15

0.06

-0.02

S

TIS 0.29 0.40 0.51 0.05 -0.03

STAD

0.05

-0.03

SE

0.27

0.06

-0.15

APS

0.42

0.05

-0.16

0.50

0.09

-0.15

APS_MHC_II

TGCT

1.00 0.84 0.95 0.49 0.72 -0.02 0.03 APS

0.84 1.00 0.87 0.72 0.88 -0.02 0.00 APS7

-0.5

0.95 0.87 1.00 0.60 0.80 0.01 -0.04 APS_MHC_II

0.06

0.02

S

0.04

-0.14

PHBR_I

TIS

PHBR_I

PHBR_II

-0.07

-0.14

PHBR_II

0.72 0.89 0.80 0.82 1.00 0.06 0.02 IIS

0.04

-0.07

SE

0.60

0.01

-0.04

APS_MHC_II

0.49

-0.02

0.03

APS

-0.02

0.00

THCA 0.52 0.61 -0.00-0.03**APS** 0.5 0 0.74 APS7 0.00 -0.01-0.5 APS_MHC_II -0.030.66 0.74 0.03

0.07

-0.00

S

0.07

0.07

-0.09

PHBR_I

0.52

0.61

-0.00

-0.03

APS

0.74

0.00

-0.01

0.66

0.03

-0.03

APS_MHC_II

0.07

0.00

 SIT

TIS

IIS

PHBR_I

PHBR_II

0.00

-0.00

-0.09

THYM -0.020.47 NA NA **APS** 0.5 0 NA APS7 0.03 0.64 NA -0.5 APS_MHC_II NA 0.03 0.54 NA

-0.02 0.03 0.03 1.00 0.49 NA NA TIS

0.47 0.64 0.54 0.49 1.00 NA NA IIS

NA NA PHBR_I NA $\mathsf{N}\mathsf{A}$ NA PHBR_II

 SIT

APS_MHC_II

 $\overline{\mathbb{S}}$

APS

PHBR_I

UCEC 0.32 0.49 0.09 NA **APS** 0.5 0 NA APS7 0.40 0.54 0.01 -0.5 APS_MHC_II NA 0.46 0.18 TIS 0.32 0.40 0.46 0.11 NA 0.49 0.11 NA IIS 0.54 0.01 0.11 -0.19 PHBR_I 0.09 0.18 0.11

NA NA NA NA NA -0.19PHBR_II

 $\overline{\mathbb{S}}$

SE

APS_MHC_II

APS

PHBR_I

UCS APS 0.49 0.62 -0.190.06 0.5 0 APS7 0.54 0.65 -0.15 0.01 -0.5 APS_MHC_II 0.52 -0.150.03 TIS 0.49 0.54 0.52 -0.08-0.10IIS -0.01-0.21

0.62 0.65 0.70 0.84 1.00 -0.01 -0.21 IIS

-0.19 -0.15 -0.15 -0.08 -0.01 1.00 -0.01 PHBR_I

-0.19 -0.15 -0.15 -0.08 -0.01 1:00 -0.01 PHBR_I

0.06 0.01 0.03 -0.10 -0.21 -0.01 1:00 PHBR_II

APS_MHC_I

UVM APS 0.63 -0.11-0.150.5 0 APS7 0.65 -0.11-0.17-0.5

APS_MHC_II -0.05-0.19

0.63 0.65 0.67 -0.02-0.11

TIS

IIS -0.06-0.13

PHBR_I -0.11-0.11-0.05-0.02-0.060.07

-0.15-0.17-0.19-0.11-0.130.07 PHBR_II

PHBR_I APS SE $\overline{\mathbb{S}}$ PHBR_II APS_MHC_II