

## Tumor suppressor and DNA damage response panel 1

(73 analytes)

Gene Symbol	Target protein name	UniProt ID (& link)	Modification*
ATM	Serine-protein kinase ATM, Ataxia telangiectasia mutated	<a href="#">Q13315</a>	
ATM	Serine-protein kinase ATM, Ataxia telangiectasia mutated	<a href="#">Q13315</a>	pS2996
ATM	Serine-protein kinase ATM, Ataxia telangiectasia mutated	<a href="#">Q13315</a>	
ATM	Serine-protein kinase ATM, Ataxia telangiectasia mutated	<a href="#">Q13315</a>	pS367
ATR	Serine/threonine-protein kinase ATR	<a href="#">Q13535</a>	pT1989
ATR	Serine/threonine-protein kinase ATR	<a href="#">Q13535</a>	
ATRIP	ATR interacting protein	<a href="#">Q8WXE1</a>	pS224
ATRIP	ATR interacting protein	<a href="#">Q8WXE1</a>	
BRCA1	Breast cancer type 1 susceptibility protein	<a href="#">P38398</a>	pS1524
BRCA1	Breast cancer type 1 susceptibility protein	<a href="#">P38398</a>	
BRCA2	Breast cancer type 2 susceptibility protein	<a href="#">P51587</a>	pS1680
BRCA2	Breast cancer type 2 susceptibility protein	<a href="#">P51587</a>	
BRIP1	BRCA1 interacting protein C-terminal helicase 1 / Fanconi anemia group J protein	<a href="#">Q9BX63</a>	
BRIP1	BRCA1 interacting protein C-terminal helicase 1 / Fanconi anemia group J protein	<a href="#">Q9BX63</a>	pS1032
BRIP1	BRCA1 interacting protein C-terminal helicase 2	<a href="#">Q9BX63</a>	pS930
BRIP1	BRCA1 interacting protein C-terminal helicase 2	<a href="#">Q9BX63</a>	
BRIP1		<a href="#">Q9BX63</a>	pT918
C17orf70 / FAAP100	Chromosome 17 open reading frame 70 / Fanconi anemia-associated protein of 100 kDa	<a href="#">Q0VG06</a>	
C17orf70 / FAAP100	Chromosome 17 open reading frame 70 / Fanconi anemia-associated protein of 100 kDa	<a href="#">Q0VG06</a>	pS667
CHEK1	Serine/threonine-protein kinase Chk1, CHK1 checkpoint homolog (S. pombe)	<a href="#">Q14757</a>	pS317
CHEK1	Serine/threonine-protein kinase Chk1, CHK1 checkpoint homolog (S. pombe)	<a href="#">Q14757</a>	
CLU	Clusterin	<a href="#">P10909</a>	
FancA	Fanconi anemia group A protein	<a href="#">Q15360</a>	
FANCD2	Fanconi anemia, complementation group D2	<a href="#">Q9BXW9</a>	uK561
FANCD2	Fanconi anemia, complementation group D2	<a href="#">Q9BXW9</a>	
FANCD2	Fanconi anemia, complementation group D2	<a href="#">Q9BXW9</a>	
FancI	Fanconi anemia group I protein	<a href="#">Q9NV11</a>	pS730
FEN1	Flap structure-specific endonuclease 1	<a href="#">P39748</a>	
GAPDH	Glyceraldehyde-3-phosphate dehydrogenase	<a href="#">P04406</a>	
GSTP1	Glutathione S-transferase pi	<a href="#">P09211</a>	
H2AX	H2A Histone Family, Member X	<a href="#">P16104</a>	pS140
JUN	Jun oncogene	<a href="#">P05412</a>	
JUN	Jun oncogene	<a href="#">P05412</a>	pS243
JUN	Jun oncogene	<a href="#">P05412</a>	pS63
MDC1	Mediator of DNA-damage checkpoint 1	<a href="#">Q14676</a>	pS329
MDC1	Mediator of DNA-damage checkpoint 1	<a href="#">Q14676</a>	
NBN	Nibrin	<a href="#">Q60934</a>	
NBN	Nibrin	<a href="#">Q60934</a>	pS432
NBN	Nibrin	<a href="#">Q60934</a>	pS343
NBN	Nibrin	<a href="#">Q60934</a>	
PALB2	Partner and localizer of BRCA2	<a href="#">Q86YC2</a>	pS376
PARP1	Poly [ADP-ribose] polymerase 1	<a href="#">P09874</a>	pS177
PARP1	Poly [ADP-ribose] polymerase 1	<a href="#">P09874</a>	
PCNA	Proliferating cell nuclear antigen	<a href="#">P12004</a>	
PCNA	Proliferating cell nuclear antigen	<a href="#">P12004</a>	
PTPRC	Protein tyrosine phosphatase, receptor type, C	<a href="#">P08575</a>	
PTPRC	Protein tyrosine phosphatase, receptor type, C	<a href="#">P08575</a>	
RAD18	E3 ubiquitin-protein ligase RAD18, RAD18 homolog (S. cerevisiae)	<a href="#">Q9NS91</a>	pS471
RAD18	E3 ubiquitin-protein ligase RAD18, RAD18 homolog (S. cerevisiae)	<a href="#">Q9NS91</a>	
RAD18	E3 ubiquitin-protein ligase RAD18, RAD18 homolog (S. cerevisiae)	<a href="#">Q9NS91</a>	
RAD23B	RAD23 homolog B (S. cerevisiae)	<a href="#">P54727</a>	
RAD23B	RAD23 homolog B (S. cerevisiae)	<a href="#">P54727</a>	
RAD50	DNA repair protein RAD50, RAD50 homolog (S. cerevisiae)	<a href="#">Q92878</a>	pS635
RAD50	DNA repair protein RAD50, RAD50 homolog (S. cerevisiae)	<a href="#">Q92878</a>	
RAD51C	DNA repair protein RAD51 homolog 3	<a href="#">Q43502</a>	
RAD51C	DNA repair protein RAD51 homolog 3	<a href="#">Q43502</a>	pS20
RB1	Retinoblastoma-associated protein	<a href="#">P06400</a>	
RB1	Retinoblastoma-associated protein	<a href="#">P06400</a>	pS807
REV3L	DNA polymerase zeta catalytic subunit	<a href="#">O60673</a>	pS1724
REV3L	DNA polymerase zeta catalytic subunit	<a href="#">O60673</a>	
RIF1	Telomere-associated protein RIF1	<a href="#">Q5UIP0</a>	
RRM2	Ribonucleotide reductase M2 polypeptide	<a href="#">P31350</a>	
RRM2	Ribonucleotide reductase M2 polypeptide	<a href="#">P31350</a>	
TERF2	Telomeric repeat-binding factor 2	<a href="#">Q15554</a>	pS323
TERF2	Telomeric repeat-binding factor 2	<a href="#">Q15554</a>	
TOPBP1	DNA topoisomerase 2-binding protein 1	<a href="#">Q92547</a>	pT1062
TOPBP1	DNA topoisomerase 2-binding protein 1	<a href="#">Q92547</a>	
TOPBP1	DNA topoisomerase 2-binding protein 1	<a href="#">Q92547</a>	
UBE2C	Ubiquitin-conjugating enzyme E2C	<a href="#">O00762</a>	
UBE2C	Ubiquitin-conjugating enzyme E2C	<a href="#">O00762</a>	
UBE2I	Ubiquitin-conjugating enzyme E2I (UBC9 homolog, yeast)	<a href="#">P63279</a>	
UBE2T	Ubiquitin-conjugating enzyme E2T	<a href="#">Q9NPD8</a>	pS184
UBE2T	Ubiquitin-conjugating enzyme E2T	<a href="#">Q9NPD8</a>	

\*blanks mean the assay detects the non-modified peptide sequence