abcam

Product datasheet

DNA Damage Kinases Panel (ATM, ATM pS1981, ATR, ATR pS428, DNA-PKcs, DNA-PKcs pS2056) ab103970

2 References 4 Images

Overview

Product name DNA Damage Kinases Panel (ATM, ATM pS1981, ATR, ATR pS428, DNA-PKcs, DNA-PKcs pS2056)

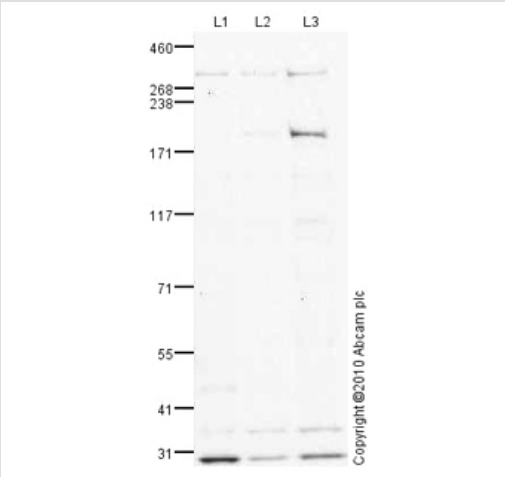
Product overview ab103970 is a DNA Damage Kinases Panel designed for the validation and characterization of the phosphorylation state of the DNA damage responsive kinases ATM and DNA-PKcs. ATM and DNA-PK are protein kinases that are active and become phosphorylated in response to DNA double strand breaks (DSBs). ATM is phosphorylated on S1981 and phosphorylates various proteins during the cellular response to DNA DSBs, while DNA-PK, a key component of the non-homologous end-joining pathway of DSB repair, is phosphorylated on S2056.

Properties

Storage instructions Please refer to protocols.

Components	1 units
ab36810 - Anti-ATM (phospho S1981) antibody [10H11.E12]	1 x 25µg
ab82512 - Anti-ATM antibody	1 x 25µg
ab178407 - Anti-ATR (phospho S428) antibody [EPR2184]	1 x 10µl
ab2905 - Anti-ATR antibody - ChIP Grade	1 x 25µl
ab18192 - Anti-DNA PKcs (phospho S2056) antibody - ChIP Grade	1 x 25µg
ab70250 - Anti-DNA PKcs antibody	1 x 25µl

Images



Western blot - DNA Damage Response Kinases Panel (ab103970)

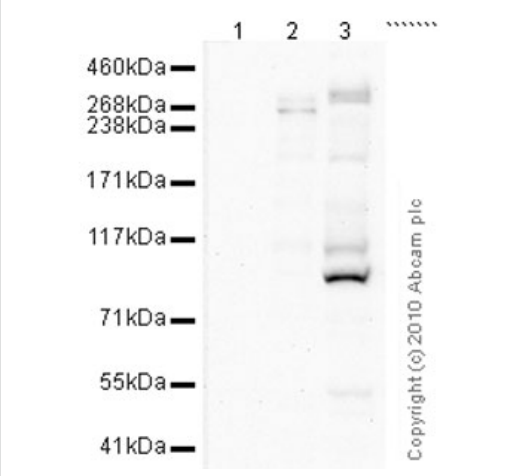
All lanes : Anti-ATM antibody (ab82512) at 1 µg/ml

Lane 1 : HepG2 (Human hepatocellular liver carcinoma cell line) Whole Cell Lysate
Lane 2 : HEK293 (Human embryonic kidney cell line) Whole Cell Lysate
Lane 3 : HeLa (Human epithelial carcinoma cell line) Nuclear Lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

ab82512 was raised against an immunogen that is predicted to cross react with both isoform 1 (350 kDa) and isoform 2 (195 kDa) of Human Serine-protein kinase ATM (ATM). We believe that the band observed at 195 kDa corresponds to isoform 2.



Western blot - DNA Damage Kinases Panel (ATM, ATM phospho S1981, DNA-PKcs, DNA-PKcs phospho S2056) (ab103970)

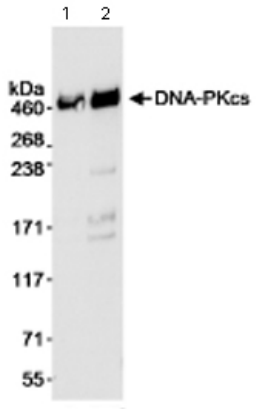
All lanes : Anti-ATM (phospho S1981) antibody [10H11.E12] (ab36810) at 10 µg/ml

Lane 1 : HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate
Lane 2 : Extract from Patient with Ataxia-Telangiectasia Whole Cell Lysate
Lane 3 : Irradiated HeLa Whole Cell Lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat polyclonal to Mouse IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Additional bands at: 100 kDa, 110 kDa, 145 kDa, 200 kDa. We are unsure as to the identity of these extra bands.

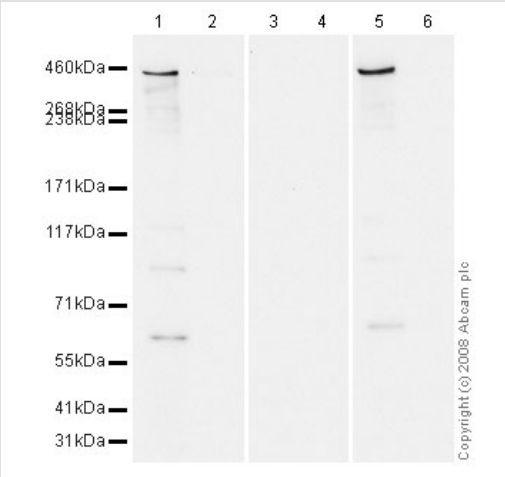


Western blot - DNA Damage Kinases Panel (ATM, ATM phospho S1981, DNA-PKcs, DNA-PKcs phospho S2056) (ab103970)

All lanes : Anti-DNA PKcs antibody (ab70250) at 0.1 µg/ml

Lane 1 : Whole cell lysate from Hela cells at 15 µg
Lane 2 : Whole cell lysate from Hela cells at 50 µg

Additional bands at: 170 kDa, 180 kDa, 230 kDa. We are unsure as to the identity of these extra bands.



Western blot - DNA Damage Response Kinases Panel (ab103970)

All lanes : Anti-DNA PKcs (phospho S2056) antibody - ChIP Grade (ab18192) at 1 µg/ml

Lane 1 : HeLa Gamma Irradiated Whole Cell Lysate Pack (ab13823)
Lane 2 : Untreated HeLa cell extract
Lane 3 : HeLa Gamma Irradiated Whole Cell Lysate Pack (ab13823) with Human DNA PKcs (phospho S2056) peptide (ab20406) at 1 µg/ml
Lane 4 : Untreated HeLa cell extract with Human DNA PKcs (phospho S2056) peptide (ab20406) at 1 µg/ml
Lane 5 : HeLa Gamma Irradiated Whole Cell Lysate Pack (ab13823) with Human DNA PKcs peptide (ab20407) at 1 µg/ml
Lane 6 : Untreated HeLa cell extract with Human DNA PKcs peptide (ab20407) at 1 µg/ml

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Alexa Fluor Goat polyclonal to Rabbit IgG (700) at 1/10000 dilution

ab18192 specifically recognizes a band at ~460 kDa corresponding to DNA PKcs in HeLa cells that have been treated with ionizing radiation (lane 1). This band is not detected in untreated cells (lane 2). The activity of the antibody is quenched by the addition of the immunizing (modified) peptide, ab20406 (lanes 3) but not the unmodified peptide, ab20407 (lane 5). For the ab13823 irradiated HeLa cell lysate, the 4 hour post-treatment extract was used.

- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit http://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors