

PAXIP1 Antibody (N-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20825a

Specification

PAXIP1 Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	Q6ZW49
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	121341

PAXIP1 Antibody (N-term) - Additional Information

Gene ID 22976

Other Names

PAX-interacting protein 1, PAX transactivation activation domain-interacting protein, PAXIP1, PAXIP1L, PTIP

Target/Specificity

This PAXIP1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 2-35 amino acids from the N-terminal region of human PAXIP1.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

PAXIP1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

PAXIP1 Antibody (N-term) - Protein Information

Name PAXIP1

Synonyms PAXIP1L, PTIP

Function Involved in DNA damage response and in transcriptional regulation through histone

methyltransferase (HMT) complexes. Plays a role in early development. In DNA damage response is required for cell survival after ionizing radiation. In vitro shown to be involved in the homologous recombination mechanism for the repair of double-strand breaks (DSBs). Its localization to DNA damage foci requires RNF8 and UBE2N. Recruits TP53BP1 to DNA damage foci and, at least in particular repair processes, effective DNA damage response appears to require the association with TP53BP1 phosphorylated by ATM at 'Ser-25'. Together with TP53BP1 regulates ATM association. Proposed to recruit PAGR1 to sites of DNA damage and the PAGR1:PAXIP1 complex is required for cell survival in response to DNA damage; the function is probably independent of MLL-containing histone methyltransferase (HMT) complexes. However, this function has been questioned (By similarity). Promotes ubiquitination of PCNA following UV irradiation and may regulate recruitment of polymerase eta and RAD51 to chromatin after DNA damage. Proposed to be involved in transcriptional regulation by linking MLL-containing histone methyltransferase (HMT) complexes to gene promoters by interacting with promoter-bound transcription factors such as PAX2. Associates with gene promoters that are known to be regulated by KMT2D/MLL2. During immunoglobulin class switching in activated B-cells is involved in trimethylation of histone H3 at 'Lys- 4' and in transcription initiation of downstream switch regions at the immunoglobulin heavy-chain (Igh) locus; this function appears to involve the recruitment of MLL-containing HMT complexes. Conflictingly, its function in transcriptional regulation during immunoglobulin class switching is reported to be independent of the MLL2/MLL3 complex (By similarity).

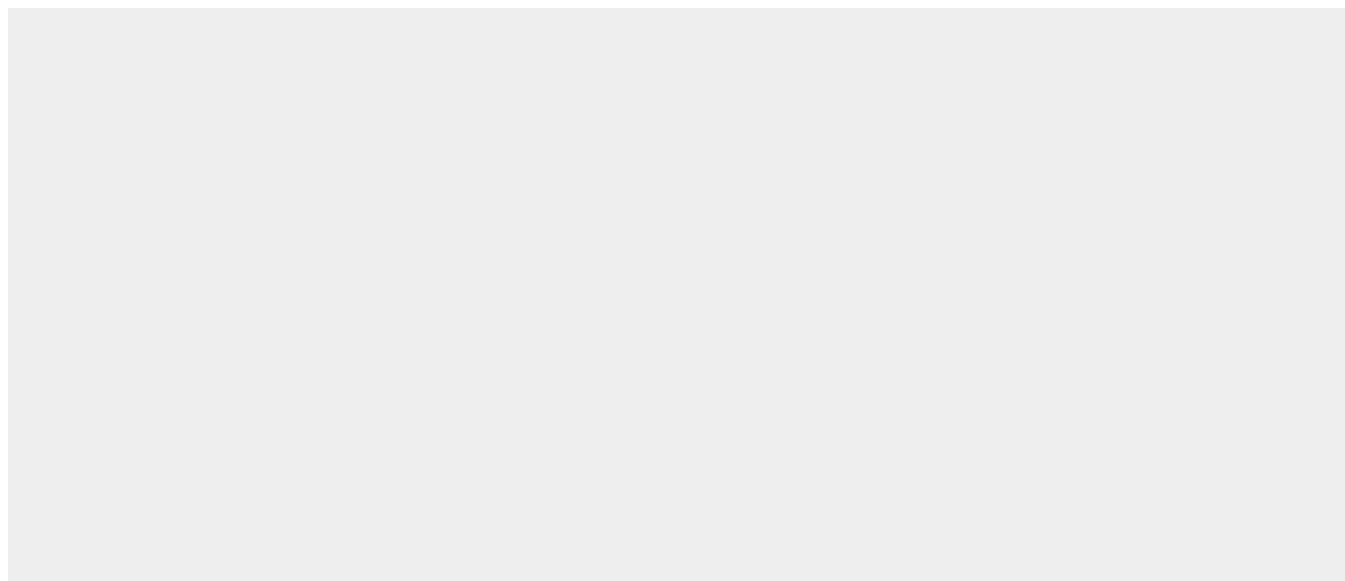
Cellular Location

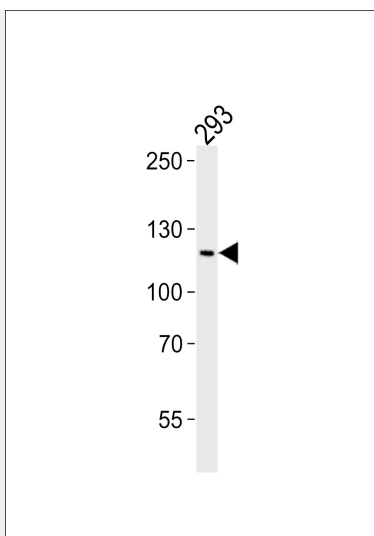
Nucleus matrix {ECO:0000250|UniProtKB:Q6NZQ4}. Chromosome Note=Localizes to DNA damage foci upon ionizing radiation

PAXIP1 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PAXIP1 Antibody (N-term) - Images



Western blot analysis of lysate from 293 cell line, using PAXIP1 Antibody (N-term)(Cat. #AP20825a). AP20825a was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 35ug.

PAXIP1 Antibody (N-term) - Background

Involved in DNA damage response and in transcriptional regulation through histone methyltransferase (HMT) complexes. Plays a role in early development. In DNA damage response is required for cell survival after ionizing radiation. In vitro shown to be involved in the homologous recombination mechanism for the repair of double-strand breaks (DSBs). Its localization to DNA damage foci requires RNF8 and UBE2N. Recruits TP53BP1 to DNA damage foci and, at least in particular repair processes, effective DNA damage response appears to require the association with TP53BP1 phosphorylated by ATM at 'Ser-25'. Together with TP53BP1 regulates ATM association. Recruits PAGR1 to sites of DNA damage and the PAGR1:PAXIP1 complex is required for cell survival in response to DNA damage; the function is probably independent of MLL-containing histone methyltransferase (HMT) complexes. Promotes ubiquitination of PCNA following UV irradiation and may regulate recruitment of polymerase eta and RAD51 to chromatin after DNA damage. Proposed to be involved in transcriptional regulation by linking MLL-containing histone methyltransferase (HMT) complexes to gene promoters by interacting with promoter-bound transcription factors such as PAX2. Associates with gene promoters that are known to be regulated by KMT2D/MLL2. During immunoglobulin class switching in activated B-cells is involved in trimethylation of histone H3 at 'Lys-4' and in transcription initiation of downstream switch regions at the immunoglobulin heavy-chain (Igh) locus; this function appears to involve the recruitment of MLL- containing HMT complexes.

PAXIP1 Antibody (N-term) - References

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Bechtel S.,et al.BMC Genomics 8:399-399(2007).
Hillier L.W.,et al.Nature 424:157-164(2003).
Margolis R.L.,et al.Hum. Genet. 100:114-122(1997).
Manke I.A.,et al.Science 302:636-639(2003).