

Microcephalin 1/BRIT1 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54430

Specification

Microcephalin 1/BRIT1 Polyclonal Antibody - Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q8NEM0
Reactivity	Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	93 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Microcephalin 1/BRIT1
Epitope Specificity	11-110/835
Isotype	IgG
Purity	
affinity purified by Protein A	
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm, cytoskeleton, centrosome.
SIMILARITY	Contains 3 BRCT domains.
SUBUNIT	Contains 3 BRCT domains.
DISEASE	Defects in MCPH1 are the cause of microcephaly primary type 1 (MCPH1) [MIM:251200]; also known as true microcephaly or microcephaly vera. Microcephaly is defined as a head circumference more than 3 standard deviations below the age-related mean. Brain weight is markedly reduced and the cerebral cortex is disproportionately small. Despite this marked reduction in size, the gyral pattern is relatively well preserved, with no major abnormality in cortical architecture. Primary microcephaly is further defined by the absence of other syndromic features or significant neurological deficits. This entity is inherited as autosomal recessive trait. This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Important Note	

Background Descriptions

Microcephalin modulates brain size and has been proliferating under strong positive selection for several thousand years, although the nature of the positive selection is poorly understood. Human Microcephalin contains three BRCA1 C-terminal (BRCT) domains and shares 57% identity with its mouse ortholog, the most conserved regions being BRCT domains where there is 80% identity. Predominant expression of human Microcephalin is observed in fetal brain, liver and kidney tissues

and is expressed during neurogenesis in mice. Microcephalin displays significantly higher rates of protein evolution in primates than in rodents; this trend is most noticeable for the subset of genes associated with nervous system development. Microcephalin has a very young, single nucleotide, polymorphism haplotype associated with modern humans; this gene is presumably still evolving in Homo sapiens. It functions in DNA damage response and regulation of cell cycle checkpoints.

Microcephalin 1/BRIT1 Polyclonal Antibody - Additional Information

Gene ID 79648

Other Names

Microcephalin, MCPH1 ([HGNC:6954](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=6954))

Target/Specificity

Expressed in fetal brain, liver and kidney.

Dilution

WB~1:1000
IHC-P~N/A
IHC-F~N/A
IF~1:50~200
ICC~N/A
E~N/A

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Microcephalin 1/BRIT1 Polyclonal Antibody - Protein Information

Name MCPH1 ([HGNC:6954](#))

Function

Implicated in chromosome condensation and DNA damage induced cellular responses. May play a role in neurogenesis and regulation of the size of the cerebral cortex.

Cellular Location

Cytoplasm, cytoskeleton, microtubule organizing center, centrosome

Tissue Location

Expressed in fetal brain, liver and kidney.

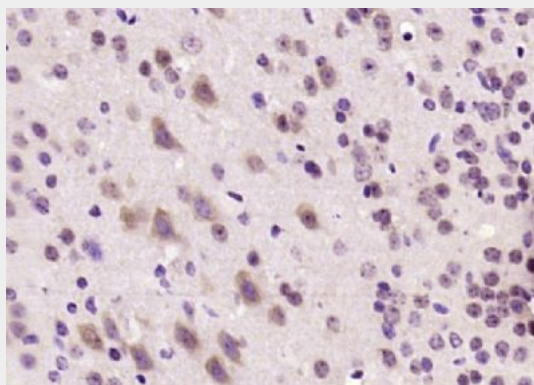
Microcephalin 1/BRIT1 Polyclonal Antibody - Protocols

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](#)

Microcephalin 1/BRIT1 Polyclonal Antibody - Images



Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Microcephalin 1, BRIT1) Polyclonal Antibody, Unconjugated (bs-11227R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.