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# ABHD12 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8904a

## Product Information

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| **Application** | IHC-P, FC, WB, E |
| **Primary Accession** | Q8N2K0 |
| **Other Accession** | Q6AYT7, Q99LR1, Q4R766, Q08DW9 |
| **Reactivity** | Human |
| **Predicted** | Bovine, Monkey, Rat |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB22386 |
| **Calculated MW** | 45097 |
| **Antigen Region** | 40-66 |

## Additional Information

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| **Gene ID** | 26090 |
| **Other Names** | Monoacylglycerol lipase ABHD12, 2-arachidonoylglycerol hydrolase, Abhydrolase domain-containing protein 12, ABHD12, C20orf22 |
| **Target/Specificity** | This ABHD12 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 40-66 amino acids from the N-terminal region of human ABHD12. |
| **Dilution** | IHC-P~~1:100~500 FC~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration. |
| **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** | ABHD12 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | ABHD12 {ECO:0000303\|PubMed:20797687, ECO:0000312\|HGNC:HGNC:15868} |

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| **Function** | Lysophosphatidylserine (LPS) lipase that mediates the hydrolysis of lysophosphatidylserine, a class of signaling lipids that regulates immunological and neurological processes (PubMed:25290914, PubMed:30237167, PubMed:30420694, PubMed:30643283, PubMed:30720278). Represents a major lysophosphatidylserine lipase in the brain, thereby playing a key role in the central nervous system (By similarity). Also able to hydrolyze oxidized phosphatidylserine; oxidized phosphatidylserine is produced in response to severe inflammatory stress and constitutes a proapoptotic 'eat me' signal (PubMed:30643283). Also has monoacylglycerol (MAG) lipase activity: hydrolyzes 2-arachidonoylglycerol (2-AG), thereby acting as a regulator of endocannabinoid signaling pathways (PubMed:22969151, PubMed:24027063). Has a strong preference for very-long-chain lipid substrates; substrate specificity is likely due to improved catalysis and not improved substrate binding (PubMed:30237167). |
| **Cellular Location** | Endoplasmic reticulum membrane; Single-pass membrane protein |

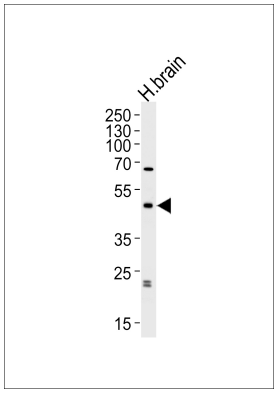
## Background

ABHD12 has 2-arachidonoylglycerol hydrolase activity (By similarity). It may be a regulator of endocannabinoid signaling pathways (By similarity).

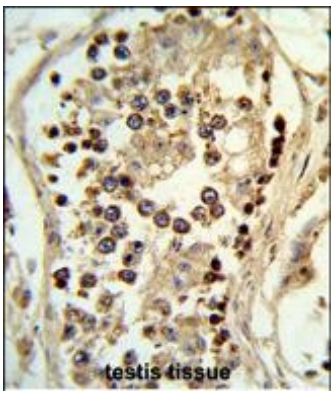
## References

Bechtel S., et.al., BMC Genomics 8:399-399(2007).

## Images

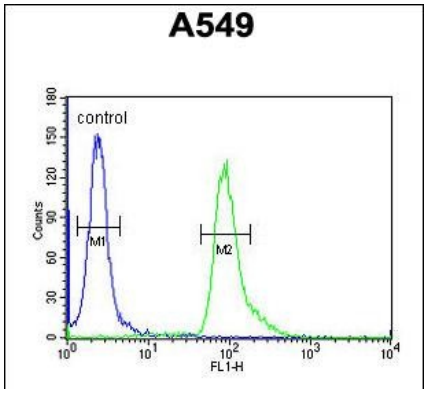



Western blot analysis of lysate from human brain tissue lysate, using ABHD12 Antibody (N-term)(Cat. #AP8904a). AP8904a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug per lane.




Formalin-fixed and paraffin-embedded human testis tissue reacted with ABHD12 Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

ABHD12 Antibody (N-term) (Cat. #AP8904a) flow cytometric analysis of A549 cells (right histogram) compared to a negative control cell (left




histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.