

GDPD5 Antibody
Catalog # ASC11781**Specification**

GDPD5 Antibody - Product Information

Application	WB, IHC, IF
Primary Accession	Q8WTR4
Other Accession	NP_110419 , 189571657
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	Predicted: 40, 67 kDa

Application Notes

Observed: 52 kDa KDa
GDPD5 antibody can be used for detection of GDPD5 by Western blot at 1 - 2 µg/ml. Antibody can also be used for Immunohistochemistry at 5 µg/mL. For Immunofluorescence start at 20 µg/mL.

GDPD5 Antibody - Additional InformationGene ID **81544****Target/Specificity**

GDPD5; GDPD5 antibody is human, mouse and rat reactive. At least three isoforms of GDPD5 are known to exist.

Reconstitution & Storage

GDPD5 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

Precautions

GDPD5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

GDPD5 Antibody - Protein InformationName GDPD5 ([HGNC:28804](#))**Function**

Glycerophosphodiester phosphodiesterase that promotes neurite formation and drives spinal motor neuron differentiation (By similarity). Mediates the cleavage of glycosylphosphatidylinositol (GPI) anchor of target proteins: removes the GPI-anchor of RECK, leading to release RECK from the plasma membrane (By similarity). May contribute to the osmotic regulation of cellular glycerophosphocholine (By similarity).

Cellular Location

Endomembrane system {ECO:0000250|UniProtKB:Q640M6}; Multi-pass membrane protein. Cytoplasm, perinuclear region {ECO:0000250|UniProtKB:Q640M6}. Cell projection, growth cone

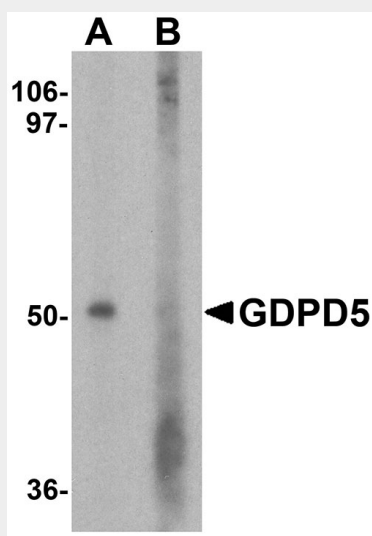
{ECO:0000250|UniProtKB:Q640M6}. Note=In a punctate perinuclear pattern
{ECO:0000250|UniProtKB:Q640M6}

GDPD5 Antibody - Protocols

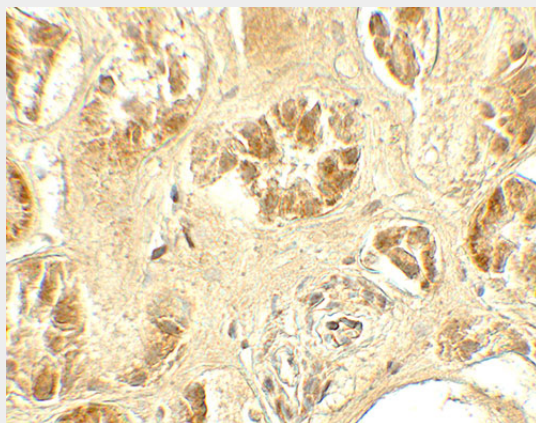
Provided below are standard protocols that you may find useful for product applications.

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

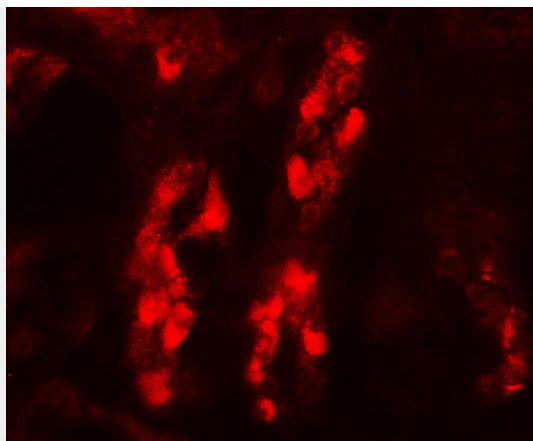
GDPD5 Antibody - Images



Western blot analysis of GDPD5 in mouse kidney tissue lysate with GDPD5 antibody at 1 μ g/ml in (A) the absence and (B) the presence of blocking peptide.



Immunohistochemistry of GDPD5 in human kidney tissue with GDPD5 antibody at 5 μ g/mL.



Immunofluorescence of GDPD5 in human kidney tissue with GDPD5 antibody at 20 µg/mL.

GDPD5 Antibody - Background

The glycerophosphodiester phosphodiesterase domain containing 5 (GDPD5) protein, also known as GDE2, is a seven transmembrane, widely expressed protein (1) that is necessary for spinal motor neuron differentiation and retinoid-induced neuronal outgrowth (2,3). Altered choline phospholipid metabolism is a hallmark of cancer, and the elevated expression of GDPD5 correlates with malignant choline phospholipid metabolite profiles in human breast cancer (4).

GDPD5 Antibody - References

Nogusa Y, Fujioka Y, Komatsu R, et al. Isolation and characterization of two serpentine membrane proteins containing glycerophosphodiester phosphodiesterase, GDE2 and GDE6. *Gene* 2004; 337:173-9.

Rao M and Sockanathan S. Transmembrane protein GDE2 induces motor neuron differentiation in vivo. *Science* 2005; 309:2212-5.

Yanaka N, Nogusa Y, Fujioka Y, et al. Involvement of membrane protein GDE2 in retinoic acid-induced neurite formation in Neuro2A cells. *FEBS Lett.* 2007; 581:712-8.

Cao MD, Dopkens M, Krishnamachary B, et al. Glycerophosphodiester phosphodiesterase domain containing 5 (GDPD5) expression correlates with malignant choline phospholipid metabolite profiles in human breast cancer. *NMR Biomed.* 2012; 25:1033-42.