10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

EXT2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP9401c

Specification

EXT2 Antibody (Center) - Product Information

Application	**IF, WB, IHC-P, FC,E**
Primary Accession	Q93063
Other Accession	P70428, O77783
Reactivity	**Human**
Predicted	**Bovine, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**82255**
Antigen Region	**182-209**

EXT2 Antibody (Center) - Additional Information

Gene ID 2132

Other Names
Exostosin-2, Glucuronosyl-N-acetylglucosaminyl-proteoglycan/N-acetylglucosaminyl-proteoglycan 4-alpha-N-acetylglucosaminyltransferase, Multiple exostoses protein 2, Putative tumor suppressor protein EXT2, EXT2

Target/Specificity
This EXT2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 182-209 amino acids from the Central region of human EXT2.

Dilution
IF~~1:10~50
WB~~1:1000
IHC-P~~1:10~50
FC~~1:10~50

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
EXT2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

EXT2 Antibody (Center) - Protein Information

Name EXT2 (HGNC:3513)

Function Glycosyltransferase forming with EXT1 the heterodimeric heparan sulfate polymerase which catalyzes the elongation of the heparan sulfate glycan backbone (PubMed:22660413, PubMed:36402845, PubMed:36593275). Glycan backbone extension consists in the alternating transfer of (1->4)-beta-D-GlcA and (1->4)-alpha-D-GlcNAc residues from their respective UDP-sugar donors. Both EXT1 and EXT2 are required for the full activity of the polymerase since EXT1 bears the N- acetylglucosaminyl-proteoglycan 4-beta-glucuronosyltransferase activity within the complex while EXT2 carries the glucuronosyl-N- acetylglucosaminyl-proteoglycan 4-alpha-N-acetylglucosaminyltransferase activity (PubMed:36402845, PubMed:36593275). Heparan sulfate proteoglycans are ubiquitous components of the extracellular matrix and play an important role in tissue homeostasis and signaling (PubMed:22660413, PubMed:19344451).

Cellular Location
Golgi apparatus membrane; Single-pass type II membrane protein. Golgi apparatus, cis-Golgi network membrane; Single-pass type II membrane protein. Endoplasmic reticulum membrane; Single-pass type II membrane protein. Secreted {ECO:0000250|UniProtKB:O77783}. Note=The active heparan sulfate polymerase complex composed of EXT1 and EXT2 is localized to the Golgi apparatus. If both proteins are individually detected in the endoplasmic reticulum, the formation of the complex promotes their transport to the Golgi.

Tissue Location
Widely expressed..

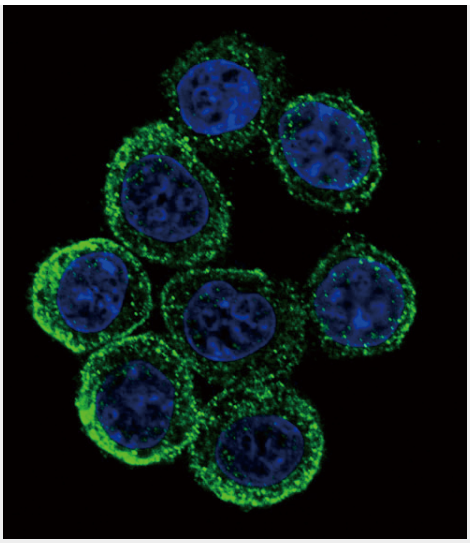
EXT2 Antibody (Center) - Protocols

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

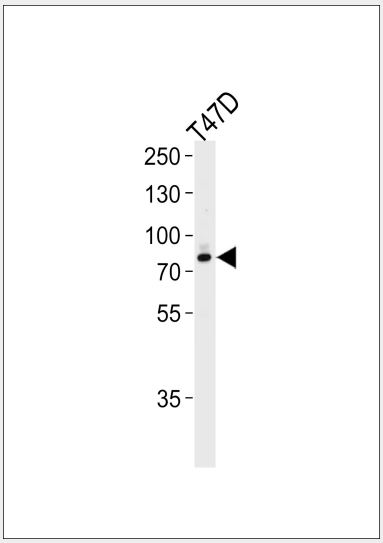
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

EXT2 Antibody (Center) - Images

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

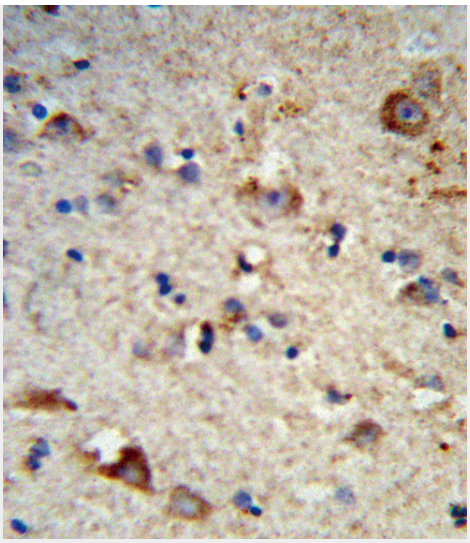


Confocal immunofluorescent analysis of EXT2 Antibody (Center)(Cat#AP9401c) with hela cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). DAPI was used to stain the cell nuclear (blue).

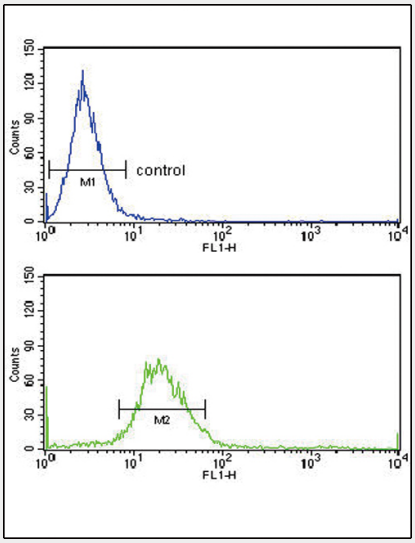


Western blot analysis of lysate from T47D cell line,using EXT2 Antibody (Center)(Cat. #AP9401c).AP9401c was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.Lysate at 35ug per lane.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



Formalin-fixed and paraffin-embedded human brain tissue reacted with EXT2 Antibody (Center), 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.



EXT2 Antibody (Center) (Cat. #AP9401c) flow cytometry analysis of Hela cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

EXT2 Antibody (Center) - Background

EXT2 encodes one of two glycosyltransferases involved in the chain elongation step of heparan sulfate biosynthesis.

EXT2 Antibody (Center) - References

Zhao, J., et al. Diabetes 59(3):751-755(2010)
Li, Y., et al. Genet Test Mol Biomarkers 13(6):825-830(2009)
Yerges, L.M., et al. J. Bone Miner. Res. 24(12):2039-2049(2009)
Heinritz, W., et al. Ann. Hum. Genet. 73 (PT 3), 283-291 (2009)
Cornelis, M.C., et al. Ann. Intern. Med. 150(8):541-550(2009)