Product Datasheet

PLAG1 Antibody (3B7) - Azide and BSA Free
H00005324-M02-50ug

Unit Size: 50 ug

Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

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Publications: 20

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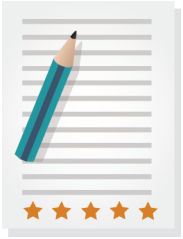
Updated 2/21/2025 v.20.1



H00005324-M02-50ug

PLAG1 Antibody (3B7) - Azide and BSA Free

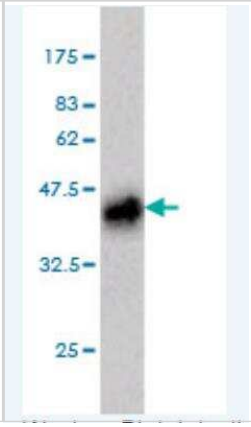
Product Information	
Unit Size	50 ug
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	3B7
Preservative	No Preservative
Isotype	IgG2a Kappa
Purity	IgG purified
Buffer	In 1x PBS, pH 7.4

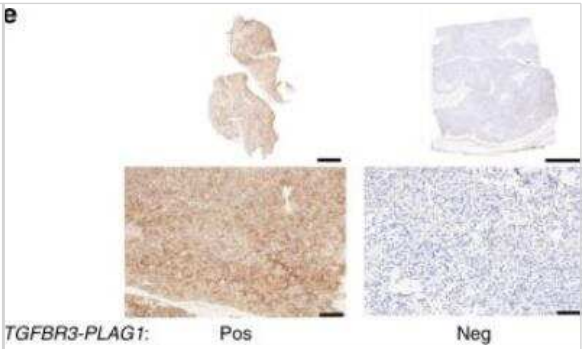
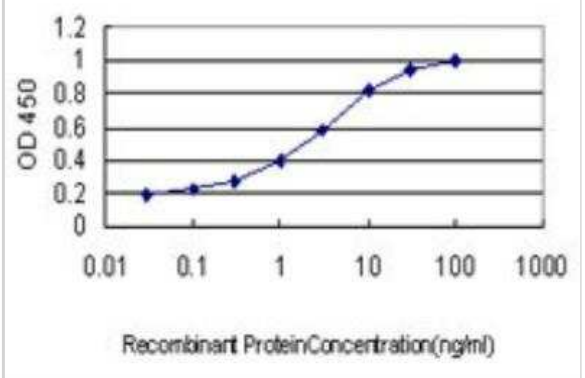
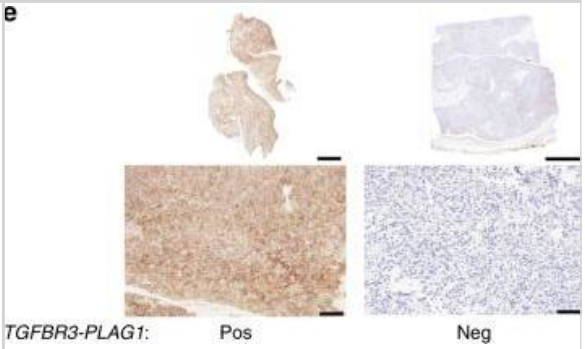
Product Description	
Description	Quality control test: Antibody Reactive Against Recombinant Protein.
Host	Mouse
Gene ID	5324
Gene Symbol	PLAG1
Species	Human, Mouse
Immunogen	PLAG1 (NP_002646, 2 a.a. ~ 99 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa. ATVIPGDLSEVRDTQKVPSGKRKRGETKPRKNFPCQLCDKAFNSVEKLKVHSY SHTGERPYKCIQQDCTKAFVSKYKLQRHMATHSPEKTHKCNYCEK
Notes	This product is produced by and distributed for Abnova, a company based in Taiwan.

Product Application Details	
Applications	Western Blot, Immunohistochemistry-Paraffin, ELISA, Immunohistochemistry
Recommended Dilutions	Western Blot 1:500, ELISA, Immunohistochemistry 1:10-1:500, Immunohistochemistry-Paraffin
Application Notes	Antibody reactivity against recombinant protein with GST tag on ELISA and WB. GST tag alone is used as a negative control. IHC usage was reported in scientific literature.

Images

Western Blot detection against Immunogen (36.52 KDa) .



Left, IHC showing TGFBR3 staining in whole tumor sections (upper panels, scale bars=5mm) and enlargement of selected areas (lower panels, scale bars=100um). Right, quantification of IHC TGFBR3 levels in TGFBR3-PLAG1 positive vs. negative tumors. P (high TGFBR3)=0.002, Fisher's exact test. n=5+34. Image collected and cropped by CiteAb from the following publication (nature.com/articles/s41467-017-01178-z), licensed under a CC-BY license.	
Detection limit for recombinant GST tagged PLAG1 is approximately 0.03ng/ml as a capture antibody.	
Immunohistochemistry: PLAG1 Antibody (3B7) [H00005324-M02] - Detection of the FGFR1-PLAG1 & TGFBR3-PLAG1 fusion genes. a Illustration of the FGFR1-PLAG1 fusion gene. Arrows show locations of genomic break points for each of the tumors. b Expression of PLAG1 (left) & FGFR1 (right) in PLAG1 fusion-negative vs. FGFR1-PLAG1-positive tumors. Graphs show fragments per kilobase of exon per million fragments mapped (FPKM), based on RNA-seq data. ****P < 0.0001; Student's t-test. n = 19 + 7. Horizontal lines show mean values. c Illustration of the TGFBR3-PLAG1 fusion gene. d Expression (FPKM) of PLAG1 (left) & TGFBR3 (right) in PLAG1 fusion-negative vs. TGFBR3-PLAG1-positive tumors. ***P < 0.001, ****P < 0.0001; Student's t-test. n = 19 + 5. Horizontal lines show mean values. e Left, IHC showing TGFBR3 staining in whole tumor sections (upper panels, scale bars=5 mm) & enlargement of selected areas (lower panels, scale bars=100 µm). Right, quantification of IHC TGFBR3 levels in TGFBR3-PLAG1 positive vs. negative tumors. P (high TGFBR3) = 0.002, Fisher's exact test. n = 5 + 34. f Poisson sample clustering based on gene expression in cohort 1, annotated by TGFBR3 IHC results Image collected & cropped by CiteAb from the following publication (https://www.nature.com/articles/s41467-017-01178-z), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	

Publications

Dalin MG, Katabi N, Persson M et al. Multi-dimensional genomic analysis of myoepithelial carcinoma identifies prevalent oncogenic gene fusions Nature Communications 2017-10-30 [PMID: 29084941]

Jiarui Li, Yilan Li, Denghui Wang, Rui Liao, Zhongjun Wu PLAG1 interacts with GPX4 to conquer vulnerability to sorafenib induced ferroptosis through a PVT1/miR-195-5p axis-dependent manner in hepatocellular carcinoma Journal of Experimental & Clinical Cancer Research : CR 2024-05-14 [PMID: 38745179]

Sanchez-Avila M, Tjendra Y, Zuo Y et al. Don't SUMP it! Utility of PLAG1 immunocytochemistry in basaloid SUMP subcategory Cancer cytopathology 2023-09-13 [PMID: 37702124] (ICC/IF, Human)

Anderson WJ, Mariño-Enríquez A, Trpkov K et al. Expanding the Clinicopathologic and Molecular Spectrum of Lipoblastoma-like Tumor in a Series of 28 Cases Modern pathology : an official journal of the United States and Canadian Academy of Pathology, Inc 2023-06-22 [PMID: 37355153]

Adepitan O, Olufunlola A, Oluwole O et al. HMGA2 Immunoexpression is frequent in salivary gland pleomorphic adenoma: immunohistochemical and molecular analyses of PLAG1 and HMGA2 in 25 cases. Int J Clin Exp Pathol. 2022-02-15 [PMID: 35265254]

Sakai H, Fujii Y, Kuwayama N et al. Plag1 regulates neuronal gene expression and neuronal differentiation of neocortical neural progenitor cells. Genes Cells. 2019-10-15 [PMID: 31442350]

Giovacchini F, Bensi C, Belli S et al. Low-grade intraductal carcinoma of salivary glands: A systematic review of this rare entity. J Oral Biol Craniofac Res. 2018-11-25 [PMID: 30555776]

Goto Y, Ibi M, Sato H et al. PLAG1 enhances the stemness profiles of acinar cells in normal human salivary glands in a cell type-specific manner. J Oral Biosci. 2020-01-30 [PMID: 32007659]

Keiko S, Shintaro S, Tomoyuki A et al. Myoepithelioma of soft tissue and bone, and myoepithelioma-like tumors of the vulvar region: Clinicopathological study of 15 cases by PLAG1 immunohistochemistry. Pathol Int. 2020-09-17 [PMID: 32940946]

Yoon YJ, Kim D, Tak KY et al. Salivary gland organoid culture maintains distinct glandular properties of murine and human major salivary glands Nature communications 2022-06-07 [PMID: 35672412] (IF/IHC, Human)

Brcic I, Igrec J, Halbwedl I Et al. Expanding the spectrum of PLAG1-rearranged lipoblastomas arising in patients over 45, with identification of novel fusion partners Modern pathology : an official journal of the United States and Canadian Academy of Pathology, Inc 2021-08-16 [PMID: 34400796]

Gerhard-Hartmann E, Vokuhl C, Roth S Et al. The histological and molecular spectrum of lipoblastoma: A case series with identification of three novel gene fusions by targeted RNA-sequencing Pathology, research and practice 2021-08-18 [PMID: 34455363] (IHC-P, Human)

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NBP2-56656PEP	PLAG1 Recombinant Protein Antigen

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