

Product datasheet

Anti-PLAG1 antibody ab55652

1 图像

概述

产品名称	Anti-PLAG1抗体
描述	小鼠单克隆抗体to PLAG1
宿主	Mouse
经测试应用	适用于: WB
种属反应性	与反应: Recombinant fragment 预测可用于: Human
免疫原	Recombinant fragment: ATVIPGDLSE VRDTQKVPSPG KRKRGETKPR KNFPCQLCDK AFNSVEKLV HSYSHTGERP YKCIQQDCTK AFVSKYKLQR HMATHSPEKT HKCNYCEK, corresponding to amino acids 2-100 of Human PLAG1 Run BLAST with ExPASy Run BLAST with NCBI

性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
存储溶液	Preservative: None PBS, pH 7.2
纯度	Protein G purified
克隆	单克隆
同种型	IgG2a
轻链类型	kappa

应用

Our [Abpromise guarantee](#) covers the use of **ab55652** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应用	Ab评论	说明
WB		Use a concentration of 1 - 5 µg/ml. This antibody has only been tested in WB against the recombinant fragment used as immunogen. We have no data on the detection of endogenous protein.

靶标

功能

Transcription factor whose activation results in up-regulation of target genes, such as IGFII, leading to uncontrolled cell proliferation: when overexpressed in cultured cells, higher proliferation rate and transformation are observed. Other target genes such as CRLF1, CRABP2, CRIP2, PIGF are strongly induced in cells with PLAG1 induction. Proto-oncogene whose ectopic expression can trigger the development of pleomorphic adenomas of the salivary gland and lipoblastomas. Overexpression is associated with up-regulation of IGFII, is frequently observed in hepatoblastoma, common primary liver tumor in childhood. Cooperates with CBFβ-MYH11, a fusion gene important for myeloid leukemia.

组织特异性

Expressed in fetal tissues such as lung, liver and kidney. Not detected or weak detection in normal adult tissues, but highly expressed in salivary gland with benign or malignant pleiomorphic adenomas with or without 8q12 aberrations, with preferential occurrence in benign tumors.

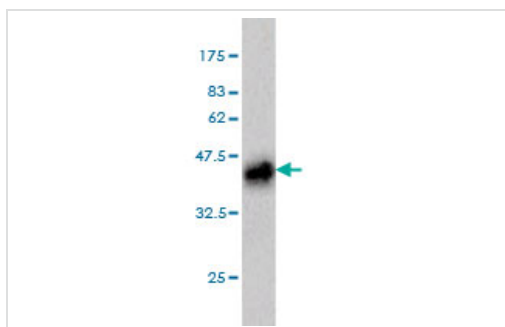
疾病相关

Note=A chromosomal aberration involving PLAG1 is found in salivary gland pleiomorphic adenomas, the most common benign epithelial tumors of the salivary gland. Translocation t(3;8)(p21;q12) with constitutively expressed beta-catenin/CTNNB1. Fusion occurs in the 5'-regulatory regions, leading to promoter swapping between the 2 genes and activation of PLAG1 expression in adenomas. The chimeric transcript is formed by fusion of CTNNB1 exon 1 to PLAG1 exon 3. Reciprocal fusion transcript consisting of PLAG1 exon 1 and CTNNB1 exon 2-16 is also revealed in some adenomas. Translocation t(3;8)(p21;q12) with transcription elongation factor SII/TCEA1. The fusion transcript is composed of 5'-non-coding sequences as well as 63 nucleotides of the coding region of TCEA1 fused to the acceptor splice site of PLAG1 exon 3. The fusion transcript encodes a truncated TCEA1-PLAG1 protein of 90 AA as well as an apparently normal PLAG1 protein. Reciprocal fusion transcript PLAG1-TCEA1 is also present in one adenoma. Translocation t(5;8)(p13;q12) with leukemia inhibitory factor receptor LIFR. This fusion occurred in the 5'-non-coding sequences of both genes, exchanging regulatory control element while preserving the coding sequences. Translocation t(6;8)(p21.3-22;q13) with Coiled-coil-helix-coiled-coil-helix domain-containing protein 7/CHCHD7. Fusion occurs in the 5' regulatory regions, leading to promoter swapping and up-regulation of PLAG1 expression. Ectopic expression of PLAG1 under the control of promoters of distinct translocation partner genes is a general pathogenetic mechanism for pleiomorphic adenomas with 8q aberrations. These fusion genes are likely to be found in adenomas with normal karyotype as this subgroup of tumors also exhibit PLAG1 activation.

Note=A chromosomal aberration involving PLAG1 may be a cause of lipoblastomas, which are benign tumors resulting from transformation of adipocytes, usually diagnosed in children. 8q12.1 to 8q24.1 intrachromosomal rearrangement with hyaluronic acid synthase 2/HAS2 results in promoter swapping and activation of PLAG1 expression. The breakpoint of HAS2 gene is in PLAG1 intron 1, whereas its coding sequence starts at exon 2 or exon 3. Translocation t(7;8)(p22;q13) with collagen 1A2/COL1A2. Fusion transcript COL1A2-PLAG1 as well as HAS2-PLAG1 encode a full-length PLAG1 protein.

序列相似性	Belongs to the krueppel C2H2-type zinc-finger protein family. Contains 7 C2H2-type zinc fingers.
结构域	C2H2-type zinc fingers 3 interacts with DNA-binding site G-clusterinc fingers. C2H2-type zinc fingers 6 and 7 interact with DNA-binding site core sequence.
翻译后修饰	Sumoylated by SUMO1; which inhibits transcriptional activity, but does not affect nuclear localization. Blockers of sumoylation pathway such as SENP3 and inactive UBE2I increases transcriptional capacity. Sumoylation is increased in the presence of PIAS1. Acetylated by lysine acetyltransferase EP300; which activates transcriptional capacity. Lysine residues that are sumoylated also seem to be target for acetylation.
细胞定位	Nucleus. Strong nucleolar localization when sumoylation is inhibited.

图片



Western blot - Anti-PLAG1 antibody (ab55652)

Western blot against tagged recombinant protein immunogen using ab55652 PLAG1 antibody at 1ug/ml. Predicted band size of immunogen is 37 kDa

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