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Mouse Anti-PLOD1 antibody

SLM-51740M

Product Name	PLOD1
Chinese Name	赖氨酸羟化酶 1 单克隆抗体
Alias	PLOD; PLOD1_HUMAN; 2-oxoglutarate 5-dioxygenase 1; EDS6; LH; LH1; LLH; Lysine hydroxylase; Lysyl hydroxylase 1; Procollagen lysine 1 2 oxoglutarate 5 dioxygenase 1; Procollagen lysine 2 oxoglutarate 5 dioxygenase 1; Procollagen-lysine.
Research Area	Chromatin and nuclear signals transcriptional regulatory factor Epigenetics
Immunogen Species	Mouse
Clonality	Monoclonal
Clone NO.	M4G1
React Species	Human,
Applications	WB=1:500-2000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	33kDa
Cellular localization	The nucleus
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human PLOD1: 51-150/727
Lsotype	IgG2b,κ
Purification	affinity purified by Protein G
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
PubMed	PubMed
Product Detail	Lysyl hydroxylase is a membrane-bound homodimeric protein localized to the

cisternae of the endoplasmic reticulum. The enzyme (cofactors iron and ascorbate) catalyzes the hydroxylation of lysyl residues in collagen-like peptides. The resultant hydroxylysyl groups are attachment sites for carbohydrates in collagen and thus are critical for the stability of intermolecular crosslinks. Some patients with Ehlers-Danlos syndrome type VI have deficiencies in lysyl hydroxylase activity. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2015]

Function:
Forms hydroxylysine residues in -Xaa-Lys-Gly- sequences in collagens. These hydroxylysines serve as sites of attachment for carbohydrate units and are essential for the stability of the intermolecular collagen cross-links.

Subcellular Location:
Rough endoplasmic reticulum membrane.

DISEASE:
Defects in PLOD1 are the cause of Ehlers-Danlos syndrome type 6 (EDS6) [MIM:225400]. EDS is a connective tissue disorder characterized by hyperextensible skin, atrophic cutaneous scars due to tissue fragility and joint hyperlaxity. EDS6 is characterized by the presence of ocular complications, particularly retinal detachment.
Defects in PLOD1 are the cause of Nevo syndrome (NEVOS) [MIM:601451]. This is a rare, autosomal recessive disorder characterized by increased perinatal length, kyphosis, muscular hypotonia, and joint laxity. Nevo syndrome and EDS-VI have similar clinical phenotypes. Some authors consider that both syndromes are the same clinical entity.

Similarity:
Contains 1 Fe2OG dioxygenase domain.

SWISS:
Q02809

Gene ID:
5351

Database links:

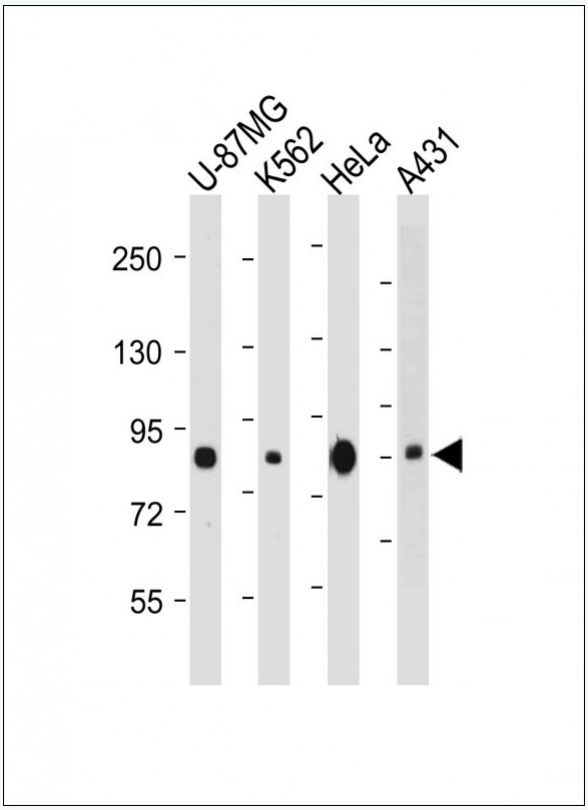
Entrez Gene: 5351 Human

Omim: 153454 Human

SwissProt: Q02809 Human

Unigene: 75093 Human

Product Picture



Sample:

Lane 1: U-87MG cell lysates

Lane 2: K562 cell lysates

Lane 3: HeLa cell lysates

Lane 4: A431 cell lysates

Primary: Anti-PLOD1 (SLM-51740M) at 1/4000 dilution

Secondary: IRDye800CW Goat Anti-Mouse IgG at 1/20000 dilution

Predicted band size: 33 kD

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Observed band size: 85 kD