bs-16748R

[Primary Antibody]

BIOSS ANTIBODIES

KLB Rabbit pAb

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- DATASHEET -

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

GenelD: 152831 **SWISS:** Q86Z14

Target: KLB

Immunogen: KLH conjugated synthetic peptide derived from human KLB:

451-550/1044.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50%

Glycerol.

Shipped at 4°C. Store at -20°C for one year. Avoid repeated

freeze/thaw cycles.

Background: BetaKlotho is a 1044 amino acid single-pass type III membrane

protein that plays a key role in bile acid and cholesterol metabolism by suppressing transcription of CYP7A1 (cholesterol 7-alpha-hydroxylase), the rate-limiting enzyme in bile acid synthesis. Homozygous negative betaKlotho mice showed dramatically elevated bile acid synthesis and secretion, as well as a strong upregulation of CYP7A1 and CYP8B1 and resistance to gallstone formation. FGF19 and FGF21 require direct interaction with betaKlotho for activation, intracellular signaling and gene expression modulation. Both Klotho and betaKlotho consist of two internal repeats similar to family 1 glycosidases. BetaKlotho contains two glycosyl hydrolase 1 regions, however since these regions lack essential glutamic acid residues at specific and crucial

locations, the domains appear to be inactive.

Applications: WB (1:500-2000)

IHC-P (1:100-500) IHC-F (1:100-500) IF (1:100-500) ICC/IF (1:100-500) ELISA (1:5000-10000)

Reactivity: (predicted: Human, Mouse,

Rat, Sheep)

Predicted MW.: 125 kDa

Subcellular Location: Cell membrane

— SELECTED CITATIONS ———

- [IF=6.208] Zizhen Guo. et al. β-Klotho Promotes the Development of Intrauterine Adhesions via the PI3K/AKT Signaling Pathway. INT J MOL SCI. 2022 Jan;23(19):11294 IF; Rat. 36232594
- [IF=2.923] Yamei Hu. et al. Fibroblast growth factor 21 (FGF21) promotes porcine granulosa cell estradiol production and proliferation via PI3K/AKT/mTOR signaling. THERIOGENOLOGY. 2022 Sep;: IF,WB;Pig. 36183492