

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human ALK-7 in direct ELISAs.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Chinese hamster ovary cell line CHO-derived recombinant human ALK-7 Met1-Glu113 Accession # Q8NER5
<b>Conjugate</b>	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
<b>Formulation</b>	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide  *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

**Immunohistochemistry** Optimal dilution of this antibody should be experimentally determined.

## PREPARATION AND STORAGE

<b>Shipping</b>	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

## BACKGROUND

Activin receptor-like kinase 7 (ALK-7), also known as Activin R1C (gene name ACVR1C), is a glycosylated 58 kDa type I receptor in the superfamily of TGF-β serine/threonine kinase receptors. It associates with type II receptors to form a signaling complex that responds to the ligands Activin AB, and Activin B, GDF3, and Nodal. ALK-7 plays a role in regulating energy balance by inhibiting insulin secretion and inducing pancreatic beta cell apoptosis. It is expressed in adipose tissue but downregulated in obesity. ALK-7 is also expressed in pituitary gonadotropic cells and in pre-eclamptic placenta. It induces the apoptosis of trophoblasts as well as ovarian granulosa and epithelial cells. Within the extracellular domain, human ALK-7 shares 95% and 91% amino acid (aa) sequence identity with mouse and rat ALK-7, respectively. Alternate splicing of human ALK-7 generates additional isoforms with either a 50 aa N-terminal truncation or with deletions of 79 aa or 157 aa that encompass the transmembrane segment.

## PRODUCT SPECIFIC NOTICES

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