

ch-ALK2. Sheep Polyclonal Antibody
Activin Receptor-Like Kinase 2

BACKGROUND

Activin Receptor-Like Kinase 2 is a member of the superfamily of type I receptors for transforming growth factor- β (TGF- β). This receptor binds both activin and bone morphogenic proteins (BMPs). In mice, these receptors are expressed mainly in the extraembryonic visceral endoderm before gastrulation and later in both embryonic and extraembryonic cells during gastrulation. Also, it has been shown that ALK2 associates with and phosphorylates Smad1 and also regulated Smad5 and Smad8 phosphorylation. Additionally, it induces the Tlx2 promoter in the absence of BMP7.

ORDERING INFORMATION

CATALOG NUMBER
X1482P

SIZE
250 μ g
FORM
Unconjugated

HOST/CLONE
Sheep

FORMULATION
Provided as solution in phosphate buffered saline with 0.08% sodium azide

CONCENTRATION
See vial for concentration

ISOTYPE
IgG

APPLICATIONS
Western Blot

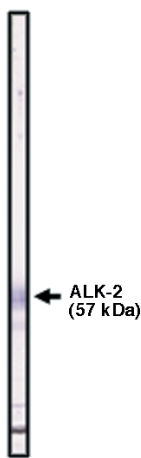
SPECIES REACTIVITY
Chicken

ACCESSION NUMBER
Chicken Q90ZK6

IMMUNOGEN

Recombinant protein derived from the extracellular domain of the chicken ALK2 protein. Protein shares significant homology with the mouse, rat and human sequences.

Western blot using ALK-2 antibody (cat. no. X1482P) on ALK-2 fusion protein.



POSITIVE CONTROL/TISSUE EXPRESSION

COMMENTS

Antibody can be used for Western blotting (5-10 $\mu\text{g/ml}$), immunoprecipitation (5 $\mu\text{g/mg}$ of protein lysate and immunohistochemistry on paraffin embedded tissue sections (5-10 $\mu\text{g/ml}$). Optimal concentration should be evaluated by serial dilutions.

PURIFICATION

Ammonium Sulfate Precipitation

SHIP CONDITIONS

Ship at ambient temperature, freeze upon arrival

STORAGE CUSTOMER

Product should be stored at -20°C . Aliquot to avoid freeze/thaw cycles

STABILITY

Products are stable for one year from purchase when stored properly

REFERENCES

1. Lai, Y.T., et al. 'Activin receptor-like kinase 2 can mediate atrioventricular cushion transformation.' Dev. Biol. 2000, 222, 1-11.
2. Gu, Z., et al. 'The type I serine/threonine kinase receptor ActRIA (ALK2) is required for gastrulation of the mouse embryo.' Development 1999, 126, 2551-2561.
3. Macias-Silva, M., et al. 'Specific activation of Smad1 signaling pathways by the BMP7 type I receptor, ALK2.' J. Biol. Chem. 1998, 273, 25628-25636

PRODUCT SPECIFIC REFERENCES