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GDF3 Rabbit pAb

Catalog # AP99473

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	Q9NR23
Other Accession	Q9NR23
Reactivity	Human
Predicted	Rat, Pig, Mouse, Rabbit, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	41387
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human GDF3
Epitope Specificity	261-364/364
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the TGF-beta family.
SUBUNIT	Homodimer or heterodimer (Potential). But, in contrast to other members of this family, cannot be disulfide-linked.
DISEASE	Defects in GDF3 are the cause of Klippel-Feil syndrome type 3 (KFS3) [MIM:613702]; also called Klippel-Feil syndrome autosomal dominant 3. KFS3 is a skeletal disorder characterized by congenital fusion of cervical vertebrae. It is due to a failure in the normal segmentation of vertebrae during the early weeks of fetal development. The clinical triad consists of short neck, low posterior hairline, and limited neck movement. Defects in GDF3 are the cause of microphthalmia isolated with coloboma type 6 (MCOPCB6) [MIM:613703]; also called isolated colobomatous microphthalmia 6. MCOPCB6 is a disorder of eye formation, ranging from small size of a single eye to complete bilateral absence of ocular tissues. Ocular abnormalities like opacities of the cornea and lens, scaring of the retina and choroid, cataract and other abnormalities like cataract may also be present. Ocular colobomas are a set of malformations resulting from abnormal morphogenesis of the optic cup and stalk, and the fusion of the fetal fissure (optic fissure). Defects in GDF3 are a cause of microphthalmia isolated type 7 (MCOP7) [MIM:613704]. MCOP7 is a disorder of eye formation, ranging from small size of a single eye to complete bilateral absence of ocular tissues. Ocular abnormalities like opacities of the cornea and lens, scaring of the retina and choroid, cataract and other abnormalities like cataract may also be present.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The protein encoded by this gene is a member of the bone morphogenetic protein (BMP) family and the TGF-beta superfamily. This group of proteins is characterized by a polybasic proteolytic processing site which is cleaved to produce a mature protein containing seven conserved cysteine residues. The members of this family are regulators of cell growth and differentiation in both embryonic and adult tissues. [provided by RefSeq, Jul 2008]

Additional Information

Gene ID	9573
Other Names	KFS3; MCOP7; MCOPCB6; Gdf-3; Vgr-2; Vgr2; ecat9; RGD1564178; GDF3_HUMAN; GDF3; GDF3_MOUSE; VG-1-related protein 2; A2SY89_RAT; growth differentiation factor 3
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	GDF3
Function	Growth factor involved in early embryonic development and adipose-tissue homeostasis. During embryogenesis controls formation of anterior visceral endoderm and mesoderm and the establishment of anterior-posterior identity through a receptor complex comprising the receptor ACVR1B and the coreceptor CRIPTO (By similarity). Regulates adipose-tissue homeostasis and energy balance under nutrient overload in part by signaling through the receptor complex based on ACVR1C and CRIPTO/Cripto (PubMed:21805089).
Cellular Location	Secreted. Cytoplasm. Note=Mainly accumulated in the cytoplasm

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