PRODUCT INFORMATION

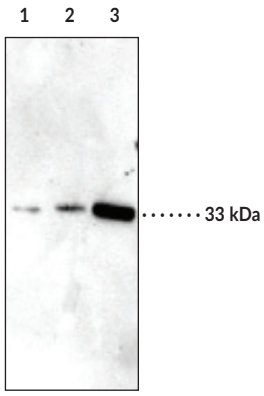
IGFBP5 Polyclonal Antibody

Item No. 10008207

Overview and Properties

Contents:	This vial contains peptide affinity-purified antibody lyophilized from 500 µl.
Synonyms:	Insulin-like Growth Factor Binding Protein 5, IBP-5, IGF-Binding Protein 5
Immunogen:	Synthetic peptide from the internal region of human IGFBP5
Species Reactivity:	(+) Mouse and rat; other species not tested
Uniprot No.:	P24593
Form:	Solid
Storage:	-20°C (as supplied)
Stability:	≥3 years
Storage Buffer:	TBS, pH 7.4, when reconstituted in in 500 µl double distilled water.
Host:	Rabbit
Application:	Western blot (WB); the recommended starting dilution 1:200. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Image



Lane 1: Mouse skeletal muscle supernatant (25 µg)
Lane 2: Mouse kidney supernatant (25 µg)
Lane 3: Rat heart supernatant (25 µg)

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Description

Insulin-like growth factor binding protein 5 (IGFBP5) is a secreted protein that binds IGF-1 and restricts it from accessing its cell-surface receptor (IGF-1R). This aids in regulation of cell growth, differentiation, and apoptosis.[1] IGFBP5 also displays IGF-1 independent transactivational activity in the nucleus.[2] Some tissues and cell types with higher levels of this protein include kidney, heart, placenta, and skeletal cells.[3] Expression has also been reported in a variety of cancers, including mammary gland and neuroblastoma.[1,4] Cayman's IGFBP5 Polyclonal Antibody is directed against a synthetic peptide sequence that partially overlaps the IGFBP5 region identified as a nuclear localization signal.[2] IGFBP5 (272 amino acids) has a calculated molecular weight of 30.6 kDa. Cayman's IGFBP5 Polyclonal Antibody can be used for Western blot applications and recognizes IGFBP5 at 33 kDa from mouse and rat samples. Reported glycosylation and phosphorylation sites may explain the band migration to 33 kDa.[1,5]

References

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3. Shimasaki, S., Shimonaka, M., Zhang, H.-P., *et al.* Identification of five different insulin-like growth factor binding proteins (IGFBPs) from adult rat serum and molecular cloning of a novel IGFBP-5 in rat and human. *J. Biol. Chem.* **266(16)**, 10646-10653 (1991).
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5. Pampusch, M.S., Xi, G., Kamanga-Sollo, E., *et al.* Production of recombinant porcine IGF-binding protein-5 and its effect on proliferation of porcine embryonic myoblast cultures in the presence and absence of IGF-I and Long-R3-IGF-I. *J. Endocrinol.* **185**, 197-206 (2005).

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