

# Product Information

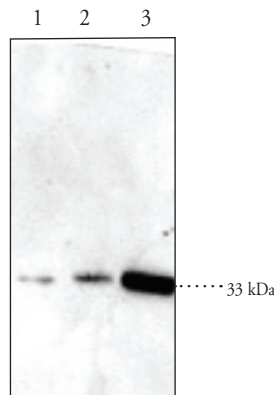


## IGFBP5 Polyclonal Antibody

Catalog No. 10008207

- Synonyms:** Insulin-like Growth Factor Binding Protein 5, IBP-5, IGF-Binding Protein 5
- Contents:** This vial contains 200 µg of peptide affinity-purified IgG in 500 µl of TBS, pH 7.4, containing 50% glycerol, 0.5 mg/ml BSA, and 0.02% sodium azide.
- Host:** Rabbit
- Antigen:** Human IGFBP5 amino acids 192-206 (CRRHMEASLQELKAS)
- Cross-reactivity:** (+) Murine and rat IGFBP5; other species not tested  
Homology of peptide antigen with IGFBP5 from other species:  
Human C R R H M E A S L Q E L K A S  
Murine C R R H M E A S L Q E f K A S  
Rat C R R H M E A S L Q E f K A S
- Stability:** ≥1 year at -20°C
- Applications:** Recommended starting dilution for western blot is 1:200 (2 µg/ml). Other applications were not optimized so working dilutions should be determined empirically.

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.<sup>1</sup> IGFBP5 also displays IGF-1 independent transactivational activity in the nucleus.<sup>2</sup> Some tissues and cell types with higher levels of this protein include kidney, heart, placenta, and skeletal cells.<sup>3</sup> Expression has also been reported in a variety of cancers, including mammary gland and neuroblastoma.<sup>1,4</sup> IGFBP5 (272 amino acids) has a calculated molecular weight of 30.6 kDa. Reported glycosylation and phosphorylation sites may explain the band migration to 33 kDa.<sup>1,5</sup> Cayman's IGFBP5 polyclonal antibody is directed against a synthetic peptide sequence that partially overlaps the IGFBP5 region identified as a nuclear localization signal.<sup>2</sup>



1. Murine skeletal muscle supernatant (25 µg)  
2. Murine kidney supernatant (25 µg)  
3. Rat heart supernatant (25 µg)

### References

- Beattie, J., Allan, G.J., Lochrie, J.D., *et al.* Insulin-like growth factor-binding protein-5 (IGFBP-5): A critical member of the IGF axis. *Biochem J.* **395**, 1-19 (2006).
- Zhao, Y., Yin, P., Bach, L.A., *et al.* Several acidic amino acids in the N-domain of insulin-like growth factor-binding protein-5 are important for its transactivation activity. *J. Biol. Chem.* **281**(20), 14184-14191 (2006).
- 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).
- Tanno, B., Negroni, A., Vitali, R., *et al.* Expression of insulin-like growth factor-binding protein 5 in neuroblastoma cells is regulated at the transcriptional level by c-Myb and B-Myb *via* direct and indirect mechanisms. *J. Biol. Chem.* **277**(26), 23172-23180 (2002).
- 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).

### Related Products

Insulin (rat) EIA Kit - Cat. No. 589501 • Resistin (murine) EIA Kit - Cat. No. 10005726 • Serum Retinol Binding Protein 4 (human recombinant) - Cat. No. 10007818 • IGFBP5 Blocking Peptide - Cat. No. 10008206 • GW 9508 - Cat. No. 10008907

**WARNING: THIS PRODUCT IS NOT INTENDED OR APPROVED FOR HUMAN OR VETERINARY USE. USE OF THIS PRODUCT FOR HUMAN OR ANIMAL TESTING IS EXTREMELY HAZARDOUS AND MAY RESULT IN DISEASE, SEVERE INJURY, OR DEATH.**

#### MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent under separate cover to the MSDS supervisor at your institution.

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