

Store at  
-20C  
#47744**IGFBP7 (E3Z8L) XP<sup>®</sup> Rabbit mAb**

**Orders:** 877-616-CELL (2355)  
orders@cellsignal.com

**Support:** 877-678-TECH (8324)

**Web:** info@cellsignal.com  
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

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<b>Applications:</b> IHC-P	<b>Reactivity:</b> H M	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 32	<b>Source/Isotype:</b> Rabbit IgG	<b>UniProt ID:</b> #Q16270	<b>Entrez-Gene Id:</b> 3490
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**Product Usage Information****Application**

Immunohistochemistry (Paraffin)

**Dilution**

1:50 - 1:200

**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. *Do not aliquot the antibody.*

**Specificity/Sensitivity**

IGFBP7 (E3Z8L) XP<sup>®</sup> Rabbit mAb recognizes endogenous levels of total IGFBP7 protein.

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Glu241 of human IGFBP7 protein.

**Background**

IGFBP7 (also known as Mac25, TAF, or IGFBP-rP1) belongs to the IGFBP superfamily, which plays an integral role in regulating insulin-like growth factor (IGF) actions in a wide variety of cell types. There are six known high-affinity IGF binding family members (IGFBP1-6), and ten low-affinity IGF binding members. These family members are structurally related, but encoded by distinct genes (1,2). IGFBP7 is a low-affinity IGF binding protein (1). The protein functions through its binding to secreted growth factors including IGF1, insulin, and activin (3,4). IGFBP7 levels have been related to cancer development and tissue injury. Loss of expression of IGFBP7 has been associated with poor survival in multiple cancer types (5,6) and with tumor chemotherapy resistance (7,8). IGFBP7 also has been identified as a cell cycle arrest biomarker for human acute kidney injury (AKI) and serves as a prognostic indicator for early stage AKI development (9-11).

**Background References**

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2. Duan, C. (2002) *J Endocrinol* 175, 41-54.
3. Yamanaka, Y. et al. (1997) *J Biol Chem* 272, 30729-34.
4. Kato, M.V. (2000) *Mol Med* 6, 126-35.
5. Akiel, M. et al. (2014) *J Hepatocell Carcinoma* 1, 9-19.
6. Benatar, T. et al. (2012) *Breast Cancer Res Treat* 133, 563-73.
7. Verhagen, H.J. et al. (2014) *Cell Death Dis* 5, e1300.
8. Okamura, J. et al. (2012) *Cancer Biol Ther* 13, 148-55.
9. Kashani, K. et al. (2013) *Crit Care* 17, R25.
10. Kellum, J.A. and Chawla, L.S. (2016) *Nephrol Dial Transplant* 31, 16-22.
11. Gocze, I. et al. (2015) *PLoS One* 10, e0120863.

**Species Reactivity**

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

**Applications Key**

**IHC-P:** Immunohistochemistry (Paraffin)

**Cross-Reactivity Key**

**H:** Human **M:** Mouse

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