

Store at  
-20C  
#52445**HGF  $\beta$  (D6S7D) XP<sup>®</sup> Rabbit mAb**

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**For Research Use Only. Not for Use in Diagnostic Procedures.**

| Applications: | Reactivity: | Sensitivity: | MW (kDa): | Source/Isotype: | UniProt ID: | Entrez-Gene Id: |
|---------------|-------------|--------------|-----------|-----------------|-------------|-----------------|
| W, IHC-P      | H           | Endogenous   | 35, 85    | Rabbit IgG      | #P14210     | 3082            |

**Product Usage Information****Application**

Western Blotting  
Immunohistochemistry (Paraffin)

**Dilution**

1:1000  
1:200

**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100  $\mu$ g/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at  $-20^{\circ}\text{C}$ . Do not aliquot the antibody.

**Specificity/Sensitivity**

HGF  $\beta$  (D6S7D) XP<sup>®</sup> Rabbit mAb recognizes endogenous levels of total HGF protein.

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with recombinant protein specific to the carboxy terminus of human HGF protein.

**Background**

The Hepatocyte Growth Factor (HGF, also known as Scatter Factor) was initially discovered as a mitogenic cytokine that induced hepatocyte replication and proliferation (1-3). HGF is produced by stromal cells where it is processed by extracellular serine proteases into a heterodimer consisting of alpha and beta subunits (4). Through activation of its receptor, cMET, HGF has a wide range of effects beyond hepatocytes that includes angiogenesis, epithelial cell proliferation and morphogenesis, and tissue protection and regeneration (5). The HGF-cMET axis has been associated with several diseases, including cancer, where HGF has been shown to promote invasion, metastasis, and drug resistance (6,7). These research studies suggest that HGF is a potential diagnostic and therapeutic target.

**Background References**

1. Nakamura, T. et al. (1984) *Biochem Biophys Res Commun* 122, 1450-9.
2. Russell, W.E. et al. (1984) *J Cell Physiol* 119, 183-92.
3. Gohda, E. et al. (1988) *J Clin Invest* 81, 414-9.
4. Kataoka, H. et al. *Cancer Metastasis Rev* 22, 223-36.
5. Nakamura, T. and Mizuno, S. (2010) *Proc Jpn Acad Ser B Phys Biol Sci* 86, 588-610.
6. Matsumoto, K. and Nakamura, T. (2006) *Int J Cancer* 119, 477-83.
7. Yano, S. et al. (2008) *Cancer Res* 68, 9479-87.

**Species Reactivity**

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

**Western Blot Buffer**

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at  $4^{\circ}\text{C}$  with gentle shaking, overnight.

**Applications Key**

**W:** Western Blotting **IHC-P:** Immunohistochemistry (Paraffin)

**Cross-Reactivity Key**

**H:** Human

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