# Technical Data Sheet

## InVivoMAb anti-human pan-Glypican

**Attention: Use of this product constitutes an agreement to Bio X Cell's Terms and Conditions which are included with this product in print and can also be found at https://bioxcell.com/terms-and-conditions.**

## Lot Specific Information

**Lot Number:** **Lot Specific***
**Volume:** **Lot Specific***
**Concentration:** **Lot Specific* (generally 4 to 11 mg/ml) ***
**Total Protein:** **Lot Specific***

*This information will be noted on the certificate of analysis that ships with this product.

## Product Information

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|---|---|
| **Catalog Number:** | **BE0412** |
| **Clone:** | **HS20** |
| **Isotype:** | Human IgG1, κ |
| **Recommended Isotype Control(s):** | RecombiMAb human IgG1 isotype control, anti-hen egg lysozyme |
| **Recommended Dilution Buffer:** | InVivoPure pH 7.0 Dilution Buffer |
| **Immunogen:** | Not available or unknown |
| **Reported Applications:** | *in vivo* blocking of Wnt signaling<br>*in vitro* blocking of Wnt signaling<br>Functional assays<br>ELISA<br>Flow cytometry<br>Immunoprecipitation |
| **Formulation:** | PBS, pH 7.0<br>Contains no stabilizers or preservatives |
| **Endotoxin:** | ≤1EU/mg (≤0.001EU/μg)<br>Determined by LAL gel clotting assay |
| **Purity:** | ≥95%<br>Determined by SDS-PAGE |
| **Sterility:** | 0.2 μm filtered |
| **Production:** | Purified from cell culture supernatant in an animal-free facility |
| **Purification:** | Protein A |
| **RRID:** | |
| **Molecular Weight:** | 150 kDa |

## Description

The HS20 monoclonal antibody reacts with a highly conserved interaction site between the C-terminal glypican (GPC) core fragment and the heparan sulfate side chains of the GPC proteins. Heparan sulfate is a highly sulphated polysaccharide and in mammalian tissues, and it is distributed on the cell surfaces and basement membranes. The HS20 antibody was originally developed and extensively validated for analyzing the biological roles of heparan sulfate chains in glypican-3 (GPC3) but subsequent studies showed that this antibody also binds heparan sulphate structures on all of the other members of the glypican family i.e. glypican-1 (GPC1), glypican-2 (GPC-2), glypican-4 (GPC4), glypican-5 (GPC5), and glypican-6 (GPC6). The HS20 antibody recognizes both the sulfated and non-sulfated portions of GPC heparan sulfate chains. This antibody has been shown to neutralize the heparan sulfate chains on GPC3 thereby disrupting the Wnt3a -GPC3 interactions leading to blockade of the Wnt3a/β-catenin signaling. The HS20 antibody was shown to inhibit the Wnt3a-dependent cell proliferation of hepatocellular carcinoma (HCC) cells in vitro and it also depicted potent anti-tumor activity in experimental model of HCC xenograft growth in nude mice.

## Storage

Store at the stock concentration at 4°C . **Do not freeze.**
It is not uncommon for a floccule or precipitate to appear during storage. The floccule is typically buffer salts precipitating out of solution or a small bit of protein aggregation. For information on how to remove floccules or precipitates see our FAQ's at https://bioxcell.com/faqs.

## Protocol Information

Since applications vary, each investigator should use the application references as a guide to help estimate the appropriate dose or concentration. The dose or concentration can be further optimized experimentally in a dose response or titration experiment.

## Application References

For a complete list of references, visit https://bioxcell.com/be0412?bxcs=9k1b3a#tab_references or scan the QR code below.

**Bio X Cell, LLC**
https://bioxcell.com
+1-866-787-3444
customerservice@bioxcell.com

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