

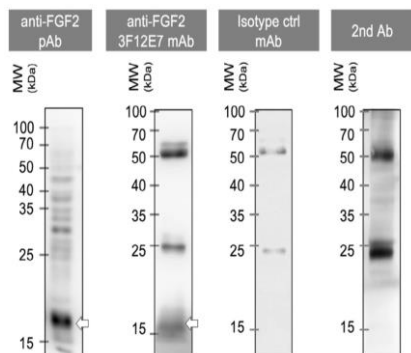
## CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

|                       |                           |                      |            |
|-----------------------|---------------------------|----------------------|------------|
| <b>Product name</b>   | FGF2, Human, clone 3F12E7 |                      |            |
| <b>Catalog number</b> | HM2380-500UG              |                      |            |
| <b>Lot number</b>     | xxxxxXxxxx-X              | <b>Expiry date</b>   | MMM YYYY   |
| <b>Volume</b>         | xx ml                     | <b>Amount</b>        | 500 µg     |
| <b>Formulation</b>    | 0.2 µm filtered in PBS    | <b>Concentration</b> | >0.5 mg/ml |
| <b>Host Species</b>   | Mouse IgG1                | <b>Conjugate</b>     | None       |
| <b>Endotoxin</b>      | <24 EU/mg                 | <b>Purification</b>  | Protein G  |
| <b>Storage</b>        | 4°C                       |                      |            |

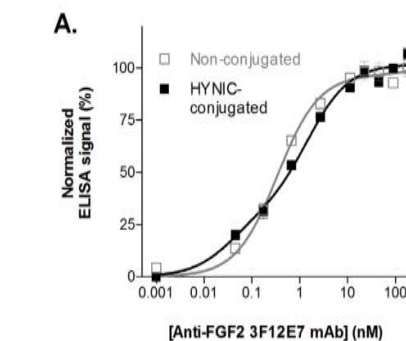
### Application notes

|             | IHC-F | IHC-P | IF | FC | FS | IA | IP | W |
|-------------|-------|-------|----|----|----|----|----|---|
| Reference # |       |       |    |    | 1  | 1  |    | 1 |
| Yes         |       |       |    |    | •  | •  |    | • |
| No          |       |       |    |    |    |    |    |   |
| N.D.        | •     | •     | •  | •  |    |    | •  |   |

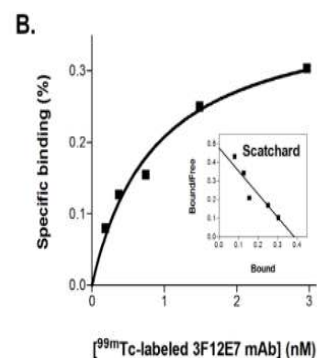
N.D. = Not Determined; IHC = Immunohistochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot



W: Immunoblotting analysis of anti-FGF2 3F12E7 mAb reactivity with B16-F10 tumor protein extracts. The white arrow indicates a supposed FGF2-band. MW, molecular weight (kDa); pAb, polyclonal antibody; 2nd Ab, secondary antibody.



IA: (A) Binding curves of intact and HYNIC-conjugated anti-FGF2 3F12E7 mAb to FGF2, as determined by ELISA. Values normalized to the reactivity obtained by non-labeled antibody at saturation (set to 100%). (B) Saturation binding profile of <sup>99m</sup>Tc-labeled 3F12E7 mAb to immobilized FGF2. Specific binding is shown.  $KD=0.86\pm 0.19$  nM. Inset, Scatchard plot of the same data. Data obtained by solid-phase radioimmunoassay, using a two-site model nonlinear regression of the specific binding curve. Experiments performed in triplicate (mean $\pm$ SEM). Data are representative of two independent experiments.



Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.

- IA: Antibody 3F12E7 can be used as capture and detection antibody
- W: Reduced conditions were used. The expected band size is ~17 kDa (Ref.1)
- FS: Anti-FGF2 3F12E7 mAb can neutralize the FGF2-driven activity (Ref.1)

### General Information

#### Description

Monoclonal antibody HM2380 clone 3F12E7 recognizes human and mouse glycoprotein fibroblast growth factor 2 (FGF2), which is a member of the growth factor family involved in a variety of biological processes like differentiation, proliferation and (tumor) angiogenesis. FGF2 exists as 5 low to high molecular weight isoforms differing in their N-terminal extensions and with distinct intracellular location and function. The conserved 18 kDa form is most widely investigated and is predominantly cytosolic and acts through cell surface receptors like FGFR1-4. Besides it has several other binding partners that mediates its function such as heparin, integrins and PF4. The FGF2 receptors are abundant expressed on cells in the tumor environment like (activated) endothelial cells. The protein is involved in normal processes such as wound healing, cell and organ differentiation and angiogenesis, but also in disease as a

result of inflammation or in tumor growth. Emerging data postulates FGF2 pathway activation as a counteracting mechanism from inhibition from angiogenesis via VEGF.

The antibody can be used in western blotting and blocks proliferation *in vitro* and tumor growth *in vivo*.

|                              |  |                                     |                                |
|------------------------------|--|-------------------------------------|--------------------------------|
| <b>Gene</b>                  | Gene name: FGF2  | Entrez Gene ID <a href="#">2257</a> | Uniprot <a href="#">P09038</a> |
| <b>Cross reactivity</b>      | Mouse FGF2 (Ref.1)   |                                     |                                |
| <b>References</b>            | 1. de Aguiar RB et al; Blocking FGF2 with a new specific monoclonal antibody impairs angiogenesis and experimental metastatic melanoma, suggesting a potential role in adjuvant settings. Cancer Lett. 2016 28:151.  |                                     |                                |
| <b>Storage&amp;stability</b> | Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.  |                                     |                                |
| <b>Precautions</b>           | For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product. |                                     |                                |

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We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC

Date

Do you have any questions or comments regarding this product? Please contact us via [support@hycultbiotech.com](mailto:support@hycultbiotech.com).