

CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

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|-----------------------|--|----------------------|-----------|
| Product name | FHL2, Human, clone F4B2-B11 | | |
| Catalog number | HM2136-20UG | | |
| Lot number | - | Expiry date | - |
| Volume | 200 µl | Amount | 20 µg |
| Formulation | 0.2 µm filtered in PBS+0.1%BSA+0.02%NaN3 | Concentration | 100 µg/ml |
| Host Species | Mouse IgG1 | Conjugate | None |
| Endotoxin | N.A. | Purification | Protein G |
| Storage | 4°C | | |

Application notes

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

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

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 1:10.

- IF: HM2136 is useful for immunofluorescence on paraformaldehyde fixed cells.

General Information

Description The monoclonal antibody F4B2-B11 reacts specifically with the LIM-only protein FHL2. Five proteins share the same structural organization and a high degree of sequence homology in this group: four and a half LIM domain protein (FHL) 1, FHL2, FHL3, FHL4, and activator of cAMP-responsive element (CRE) modulator (CREM) in testis (ACT). LIM domains are constituted by a conserved cysteine- and histidine-rich structure shaped in two repeated zinc fingers first identified in the proteins encoded by the Lin-11, Isl-1, and Mec-3 genes. The LIM domain has been shown to function as a protein-protein interaction domain, and has often been described in association with other functional protein motifs, such as homeobox and kinase domains. FHL2 seems to be a promiscuous coactivator because it modulates the activity of the androgen receptor, CRE-binding protein (CREB), and WT1, although some degree of specificity is present because it is unable to stimulate CREM- and Sp1-dependent transcription. FHL2 expression was originally described to be restricted to the heart but it is inducible in other cell types. FHL2 shows specific interaction with beta-catenin, which requires the intact structure of all four LIM domains of FHL2 and the N-terminus plus the first armadillo repeat region of beta-catenin. FHL2 is a muscle-specific repressor of LEF/TCF target genes and promotes myogenic differentiation by interacting with beta-catenin. Monoclonal antibody F4B2-B11 recognizes the N-terminal Zn-Finger motif, it does not crossreact in Western Blotting with the FHL1 and FHL3 proteins. The F4B2-B11 antibody is cross reactive with mouse and rat FHL2.

- References**
- Johnson, M et al; Diferric transferrin regulates Samson, T et al; The LIM-only proteins FHL2 and FHL3 interact with alpha- and beta-subunits of the muscle alpha7beta1 integrin receptor. J Biol Chem 2004, 279: 28641
 - Martin, B et al; The LIM-only protein FHL2 interacts with beta-catenin and promotes differentiation of mouse myoblasts. J Cell Biol 2002, 159: 113

Storage&stability Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.

Precautions 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.

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
Brenda Teunissen

Date
18/11/2020

Do you have any questions or comments regarding this product? Please contact us via support@hycultbiotech.com.