

**MONOCLONAL ANTIBODY TO
HUMAN FHL2
clone F4B2-B11**



Catalog nr	HM2136 (lot number and expiry date are indicated on the label)
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.
Species	Mouse IgG ₁
Formulation	1 ml (100 µg/ml) 0.2 µm filtered antibody solution in PBS, containing 0.02% sodium azide and 0.1% bovine serum albumin.
Application	The monoclonal antibody F4B2-B11 can be used for Western blotting and immunohistology on frozen and paraffin embedded sections. Furthermore, the monoclonal antibody F4B2-B11 is useful for immunofluorescence on paraformaldehyde fixed cells.
Use	For immunohistology and Western blotting, 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.
Storage and stability	Product should be stored at 4°C. Under recommended storage conditions, product is stable for 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 with the use of or derivation of this product.
References	1. Samson, T et al; The LIM-only proteins FHL2 and FHL3 interact with alpha- and beta-subunits of the muscle alpha7beta1 integrin receptor. <i>J Biol Chem</i> 2004, 279: 28641 2. Martin, B et al; The LIM-only protein FHL2 interacts with beta-catenin and promotes differentiation of mouse myoblasts. <i>J Cell Biol</i> 2002, 159: 113
Also available	HM2112 Monoclonal antibody against Human beta-Catenin, clone 9F2