

## Product datasheet for **TA389136**

### **FHOD1 Mouse Antibody [Clone ID: M352]**

#### **Product data:**

Product Type:	Primary Antibodies
Clone Name:	M352
Applications:	IHC, WB
Recommended Dilution:	<b>WB:</b> 1:250
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Immunogen:	FHOD1 recombinant protein that included the full length human FHOD1 sequence. This sequence has 50% homology to human FHOD3, and low homology to other formin family members.
Specificity:	The antibody detects a 140 kDa* protein corresponding to the apparent molecular mass of FHOD1 on SDS-PAGE immunoblots of human K562 and Jurkat, and has weak reactivity to FHOD1 in mouse C2C12.
Formulation:	PBS + 1 mg/ml BSA, 0.05% NaN <sub>3</sub> and 50% glycerol
Concentration:	lot specific
Purification:	Protein A Purified
Conjugation:	Unconjugated
Storage:	Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.
Stability:	After date of receipt, stable for at least 1 year at -20°C.
Predicted Protein Size:	140
Database Link:	<a href="#">Q9Y613</a>



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**Background:**

Formins include several families of proteins that regulate actin cytoskeletal dynamics via two conserved formin homology domains, FH1 and FH2. The FH1 region contains poly-proline stretches that promote interactions with profilin. The FH2 domain, located C-terminally to the FH1 domain, is highly conserved in formin proteins and possesses actin nucleation and polymerization activities. Through cooperation of FH1 and FH2, formins construct actin-based structures comprising linear, unbranched filaments that are used in stress fibers, actin cables, microspikes, and contractile rings. Several mammalian formins, including mDia1, FRL, and formin homology domain protein 1 (FHOD1) are inhibited through an intramolecular interaction between the C-terminal Dia autoregulatory domain (DAD) and its recognition region at the N-terminus. In FHOD1, this autoinhibitory interaction is disrupted through phosphorylation of Ser-1131, Ser-1137, and Thr-1141 by ROCK. Subsequent FHOD1 activation leads to stress fiber formation. In endothelial cells, thrombin activates this ROCK pathway, leading to FHOD1-mediated stress fiber formation.

**Note:**

Protein G purified tissue culture supernatant.