

#85704 Store at -20°C

**FES (D5B4Y) Rabbit mAb****Cell Signaling**  
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**For Research Use Only. Not for Use in Diagnostic Procedures.**

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IP	H M	Endogenous	93	Rabbit IgG	#P07332	2242

**Product Usage Information****Application**

Western Blotting

**Dilution**

1:1000

Immunoprecipitation

1:100

**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

**Specificity / Sensitivity**

FES (D5B4Y) Rabbit mAb recognizes endogenous levels of total FES protein.

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro422 of human FES protein.

**Background**

Fes/Fps and Fer are the only two members of a unique family of cytoplasmic protein tyrosine kinases (1,2). Fes and Fer contain a central Src homology-2 (SH2) domain and a carboxy-terminal tyrosine kinase catalytic domain. They are structurally distinguished from other members of cytoplasmic protein tyrosine kinase subfamilies by the presence of amino-terminal Fer/CIP4 homology and coiled-coil domains (3). Fes/Fps was originally identified as an oncogene from avian (Fps) and feline (Fes) retroviruses. Human c-Fes has been implicated in myeloid, vascular endothelial and neuronal cell differentiation. Mutations may activate the Fps kinase and thereby contribute to cancer (4). However, recent data strongly suggests that the c-Fes protein-tyrosine kinase is a tumor suppressor rather than a dominant oncogene in colorectal cancer (5).

**Background References**

1. Smithgall, T.E. et al. (1998) *Crit Rev Oncog* 9, 43-62.
2. Greer, P. (2002) *Nat Rev Mol Cell Biol* 3, 278-89.
3. Sangrar, W. et al. (2005) *Cancer Res* 65, 3518-22.
4. Ley, T.J. et al. (2003) *Proc Natl Acad Sci U S A* 100, 14275-80.
5. Delfino, F.J. et al. (2006) *J Biol Chem* 281, 8829-35.

**Species Reactivity**

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

**Western Blot Buffer**

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

**Applications Key****WB:** Western Blotting **IP:** Immunoprecipitation**Cross-Reactivity Key**

**H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster  
**X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse  
**GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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