

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Supervillin in direct ELISAs and Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Supervillin His1801-Thr2214 Accession # O95425
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Supervillin ("Largest" villin [family member]; also Archvillin and p250) is a 240-250 kDa member of the villin/gelsolin family of proteins. It is expressed in select cell types, including platelets, neutrophils, renal epithelium and striated muscle cells. Supervillin is found intracellularly in both the nuclear and cytoplasmic compartments. Its principal function is to serve as a scaffold for molecules that interact to oversee changes in the actin cytoskeleton at the cell membrane. It is able to both crosslink F-actin and initiate actin bundle formation. It also binds nonmuscle myosin and negatively regulates focal adhesion complexes. Human supervillin is 2214 amino acids (aa) in length. It contains an NLS (aa 927-931), five gelsolin-like repeats that interact with F-actin (aa 1441-2122), and a C-terminal villin headpiece domain (aa 2179-2214). The 250 kDa form of supervillin (archvillin) is striated muscle-specific. There is also one general nonmuscle form of supervillin (p205) that is 200-210 kDa in size and contains two blocks of deletions between aa 276-669 and 749-781. In ferret, a third 220-230 kDa intermediate isoform has been reported that is unique to smooth muscle. Over aa 1801-2214, human supervillin shares 96% aa sequence identity with mouse supervillin.

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