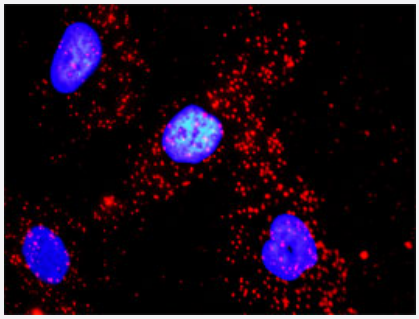
VASP & ACTG1 Protein Protein Interaction Antibody Pair

Catalog # DI0040 Size 1 Set

Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between VASP and ACTG1. HeLa cells were stained with anti-VASP rabbit purified polyclonal antibody 1:1200 and anti-ACTG1 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex. The images were analyzed using an optimized freeware (BlobFinder) download from The Centre for Image Analysis at Uppsala University.

Specification

Product Description	This protein protein interaction antibody pair set comes with two antibodies to detect the protein-protein interaction, one against the VASP protein, and the other against the ACTG1 protein for use in *in situ* Proximity Ligation Assay. See Publication Reference below.
Reactivity	Human
Quality Control Testing	Protein protein interaction immunofluorescence result. Representative image of Proximity Ligation Assay of protein-protein interactions between VASP and ACTG1. HeLa cells were stained with anti-VASP rabbit purified polyclonal antibody 1:1200 and anti-ACTG1 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex. The images were analyzed using an optimized freeware (BlobFinder) download from The Centre for Image Analysis at Uppsala University.
Supplied Product	Antibody pair set content: 1. VASP rabbit purified polyclonal antibody (100 ug) 2. ACTG1 mouse monoclonal antibody (40 ug) *Reagents are sufficient for at least 30-50 assays using recommended protocols.
Storage Instruction	Store reagents of the antibody pair set at -20°C or lower. Please aliquot to avoid repeated freeze thaw cycle. Reagents should be returned to -20°C storage immediately after use.

Applications

- *In situ* Proximity Ligation Assay (Cell)

Gene Info — ACTG1

Entrez GeneID	71
Gene Name	ACTG1
Gene Alias	ACT, ACTG, DFNA20, DFNA26
Gene Description	actin, gamma 1
Omim ID	102560 604717
Gene Ontology	Hyperlink
Gene Summary	Actins are highly conserved proteins that are involved in various types of cell motility, and mainten ance of the cytoskeleton. In vertebrates, three main groups of actin isoforms, alpha, beta and gam ma have been identified. The alpha actins are found in muscle tissues and are a major constituent of the contractile apparatus. The beta and gamma actins co-exist in most cell types as component s of the cytoskeleton, and as mediators of internal cell motility. Actin, gamma 1, encoded by this g ene, is a cytoplasmic actin found in nonmuscle cells. [provided by RefSeq
Other Designations	actin, cytoplasmic 2|actin, gamma 1 propeptide|cytoskeletal gamma-actin

Gene Info — VASP

Entrez GeneID	7408
Gene Name	VASP
Gene Alias	-
Gene Description	vasodilator-stimulated phosphoprotein
Omim ID	601703
Gene Ontology	Hyperlink

Gene Summary	Vasodilator-stimulated phosphoprotein (VASP) is a member of the Ena-VASP protein family. En a-VASP family members contain an EHV1 N-terminal domain that binds proteins containing E/D FPPPPXD/E motifs and targets Ena-VASP proteins to focal adhesions. In the mid-region of the p rotein, family members have a proline-rich domain that binds SH3 and WW domain-containing pr oteins. Their C-terminal EVH2 domain mediates tetramerization and binds both G and F actin. V ASP is associated with filamentous actin formation and likely plays a widespread role in cell adhe sion and motility. VASP may also be involved in the intracellular signaling pathways that regulate i ntegrin-extracellular matrix interactions. VASP is regulated by the cyclic nucleotide-dependent kin ases PKA and PKG. [provided by RefSeq
Other Designations	-

Pathway

- Adherens junction
- Arrhythmogenic right ventricular cardiomyopathy (ARVC)
- Fc gamma R-mediated phagocytosis
- Focal adhesion
- Focal adhesion
- Hypertrophic cardiomyopathy (HCM)
- Leukocyte transendothelial migration
- Leukocyte transendothelial migration
- Pathogenic Escherichia coli infection - EHEC
- Regulation of actin cytoskeleton
- Tight junction
- Vibrio cholerae infection