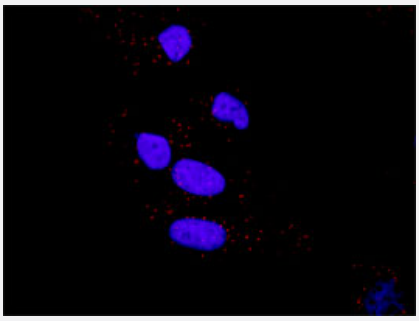
HSPB1 & F13A1 Protein Protein Interaction Antibody Pair

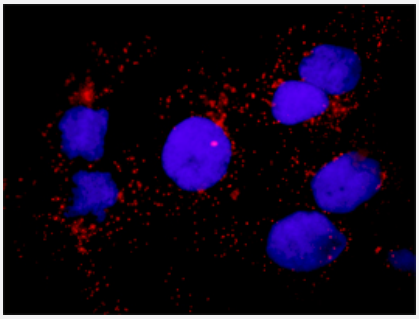
Catalog # DI0007 Size 1 Set

Applications



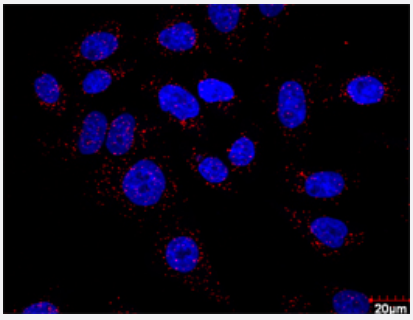
In situ Proximity Ligation Assay (Cell)

Representative image of Proximity Ligation Assay of protein-protein interactions between HSPB1 and F13A1. PC-3 cells were stained with anti-HSPB1 rabbit purified polyclonal antibody 1:100 and anti-F13A1 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).



In situ Proximity Ligation Assay (Cell)

Representative image of Proximity Ligation Assay of protein-protein interactions between HSPB1 and F13A1. Huh7 cells were stained with anti-HSPB1 rabbit purified polyclonal antibody 1:1200 and anti-F13A1 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).



Representative image of Proximity Ligation Analysis of protein-protein interactions between HSPB1 and F13A1. HeLa cells were stained with anti-HSPB1 rabbit purified polyclonal antibody 1:100 and anti-F13A1 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

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Product Description	This protein protein interaction antibody pair set comes with two antibodies to detect the protein-protein interaction, one against the HSPB1 protein, and the other against the F13A1 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 Analysis of protein-protein interactions between HSPB1 and F13A1. HeLa cells were stained with anti-HSPB1 rabbit purified polyclonal antibody 1:100 and anti-F13A1 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 Products	Antibody pair set content: 1. HSPB1 rabbit purified polyclonal antibody (100 ug) 2. F13A1 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)

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Gene Info — F13A1

Entrez GeneID	2162
Gene Name	F13A1
Gene Alias	F13A
Gene Description	coagulation factor XIII, A1 polypeptide
Omim ID	134570
Gene Ontology	Hyperlink

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Gene Summary	This gene encodes the coagulation factor XIII A subunit. Coagulation factor XIII is the last zymogen to become activated in the blood coagulation cascade. Plasma factor XIII is a heterotetramer composed of 2 A subunits and 2 B subunits. The A subunits have catalytic function, and the B subunits do not have enzymatic activity and may serve as plasma carrier molecules. Platelet factor XIII is comprised only of 2 A subunits, which are identical to those of plasma origin. Upon cleavage of the activation peptide by thrombin and in the presence of calcium ion, the plasma factor XIII dissociates its B subunits and yields the same active enzyme, factor XIIIa, as platelet factor XIII. This enzyme acts as a transglutaminase to catalyze the formation of gamma-glutamyl-epsilon-lysine crosslinking between fibrin molecules, thus stabilizing the fibrin clot. It also crosslinks alpha-2-plasmin inhibitor, or fibronectin, to the alpha chains of fibrin. Factor XIII deficiency is classified into two categories: type I deficiency, characterized by the lack of both the A and B subunits; and type II deficiency, characterized by the lack of the A subunit alone. These defects can result in a lifelong bleeding tendency, defective wound healing, and habitual abortion. [provided by RefSeq
Other Designations	FSF, A subunit|TGase|bA525O21.1 (coagulation factor XIII, A1 polypeptide)|coagulation factor XIII A1 subunit|coagulation factor XIII, A polypeptide|factor XIIIa|fibrin stabilizing factor, A subunit|fibrin oligase|protein-glutamine gamma-glutamyltransferase

Gene Info — HSPB1

Entrez GeneID	3315
Gene Name	HSPB1
Gene Alias	CMT2F, DKFZp586P1322, HMN2B, HS.76067, HSP27, HSP28, Hsp25, SRP27
Gene Description	heat shock 27kDa protein 1
Omim ID	602195 606595 608634
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene is induced by environmental stress and developmental changes. The encoded protein is involved in stress resistance and actin organization and translocates from the cytoplasm to the nucleus upon stress induction. Defects in this gene are a cause of Charcot-Marie-Tooth disease type 2F (CMT2F) and distal hereditary motor neuropathy (dHMN). [provided by RefSeq
Other Designations	OTTHUMP00000024846|estrogen-regulated 24 kDa protein|heat shock 27kD protein 1|heat shock protein beta-1|stress-responsive protein 27

Pathway

- Complement and coagulation cascades
- MAPK signaling pathway
- VEGF signaling pathway

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Disease

- Abortion
- Activated Protein C Resistance
- Acute Disease
- Adenocarcinoma
- Alzheimer disease
- Anemia
- Aneurysm
- Angina Pectoris
- Antiphospholipid Syndrome
- Arterial Occlusive Diseases
- Arteriosclerosis
- Arthritis
- Atherosclerosis
- Atrial Fibrillation
- beta-Thalassemia
- Blood Coagulation Disorders
- Brain Ischemia
- Bronchopulmonary Dysplasia
- Cadaver
- Calcinosis
- Carcinoma
- Cardiovascular Diseases
- Carotid Stenosis
- Celiac Disease

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- Cerebral Hemorrhage
- Cerebral Infarction
- Cerebrovascular Accident
- Cerebrovascular Disorders
- Charcot-Marie-Tooth Disease
- Chorioamnionitis
- Choroidal Neovascularization
- Chronic Disease
- Cleft Lip
- Cleft Palate
- Coagulation Protein Disorders
- Cognition
- Colitis
- Conjunctival Diseases
- Coronary Artery Disease
- Coronary Disease
- Coronary Thrombosis
- Critical Illness
- Crohn Disease
- Diabetes Mellitus
- Diabetic Nephropathies
- Disease Progression
- Ductus Arteriosus
- Edema
- Eye Hemorrhage
- Factor VII Deficiency

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- Factor XIII Deficiency
- Fetal Death
- Fetal Growth Retardation
- Fetal Membranes
- Foramen Ovale
- Genetic Predisposition to Disease
- Genetic Predisposition to Disease
- Heart Defects
- Heart Septal Defects
- Hemophilia A
- Hemorrhage
- Hemorrhagic Disorders
- Hyperlipidemias
- Hypertension
- Infant
- Infertility
- Inflammation
- Inflammatory Bowel Diseases
- Insulin Resistance
- Intracranial Aneurysm
- Intracranial Embolism
- Intracranial Hemorrhages
- Ischemic Attack
- Kidney Failure
- Leukomalacia
- Lung Neoplasms

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- Macular Degeneration
- Metabolic Syndrome X
- Mouth Neoplasms
- Myocardial Infarction
- Myocardial Ischemia
- Myopia
- Neoplasms
- Neuropsychological Tests
- Obesity
- Obstetric Labor
- Ovarian cancer
- Ovarian Neoplasms
- Peripheral Vascular Diseases
- Postoperative Complications
- Pre-Eclampsia
- Pregnancy Complications
- Premature Birth
- Priapism
- Pulmonary Embolism
- Purpura
- Recurrence
- Sclerosis
- Sepsis
- Shock
- Small Cell Lung Carcinoma
- Stroke

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- Subarachnoid Hemorrhage
- Thalassemia
- Thromboembolism
- Thrombophilia
- Thrombosis
- Tobacco Use Disorder
- Varicose Ulcer
- Vascular Diseases
- Venous Thrombosis
- Werner syndrome

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