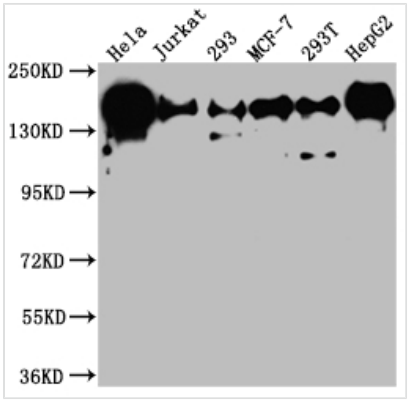
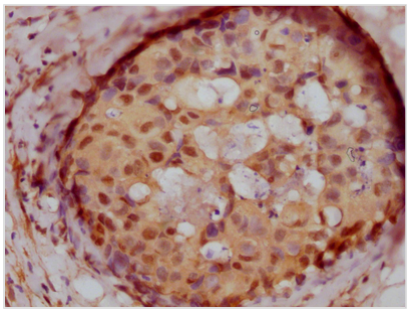
PELP1 Recombinant Monoclonal Antibody

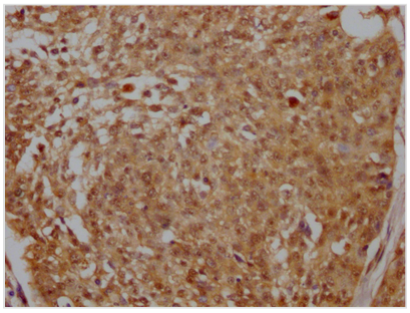
Product Code	CSB-RA999292A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	Q8IZL8
Immunogen	A synthesized peptide derived from human PELP1
Species Reactivity	Human
Tested Applications	ELISA, WB, IHC; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200
Relevance	Coactivator of estrogen receptor-mediated transcription and a corepressor of other nuclear hormone receptors and sequence-specific transcription factors. Plays a role in estrogen receptor (ER) genomic activity when present in the nuclear compartment by activating the ER target genes in a hormonal stimulation dependent manner. Can facilitate ER non-genomic signaling via SRC and PI3K interaction in the cytosol. Plays a role in E2-mediated cell cycle progression by interacting with RB1. May have important functional implications in ER/growth factor cross-talk. Interacts with several growth factor signaling components including EGFR and HRS. Involved in nuclear receptor signaling via its interaction with AR and NR3C1. May promote tumorigenesis via its interaction with and modulation of several oncogenes including SRC, PI3K, STAT3 and EGFR. Plays a role in cancer cell metastasis via its ability to modulate E2-mediated cytoskeleton changes and cell migration via its interaction with SRC and PI3K. Functions as the key stabilizing component of the Five Friends of Methylated CHTOP (5FMC) complex; the 5FMC complex is recruited to ZNF148 by methylated CHTOP, leading to desumoylation of ZNF148 and subsequent transactivation of ZNF148 target genes.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Epigenetics and Nuclear Signaling; Signal transduction
Gene Names	PELP1
Clone No.	6H4
Image	



Western Blot
Positive WB detected in: Hela whole cell lysate, Jurkat whole cell lysate, 293 whole cell lysate, MCF-7 whole cell lysate, 293T whole cell lysate, HepG2 whole cell lysate
All lanes: PELP1 antibody at 1:1000
Secondary
Goat polyclonal to rabbit IgG at 1/50000 dilution
Predicted band size: 120 kDa
Observed band size: 160 kDa



IHC image of CSB-RA999292A0HU diluted at 1:100 and staining in paraffin-embedded human breast cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



IHC image of CSB-RA999292A0HU diluted at 1:100 and staining in paraffin-embedded human cervical cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

Description

B cells were irritatingly produced with a synthetic peptide derived from human PELP1 and then fused with myeloma cells to create hybridomas. The variable light (VL) and variable heavy (VH) domains of PELP1 antibody-producing hybridomas were sequenced, which served as a blueprint for the construction of a vector for recombinant production. The PELP1 monoclonal antibody gene-carrying vector was transfected into cells, and the PELP1 recombinant monoclonal antibody was extracted and purified using affinity chromatography from the cell culture supernatant. The purified antibody was then assessed for specificity using ELISA, WB, and IHC applications and it was found to exclusively target human PELP1 protein.

The PELP1 protein plays a role in multiple cellular processes. It acts as a transcriptional co-activator, meaning that it helps to activate the expression of certain genes. It is also involved in protein-protein interactions and may help to regulate signaling pathways involved in cell growth and differentiation. In addition, PELP1 has been linked to hormone receptor signaling, with some

studies suggesting that it may play a role in breast cancer development and progression.