Uniprot ID: P04792
Protein name: HSPB1_HUMAN

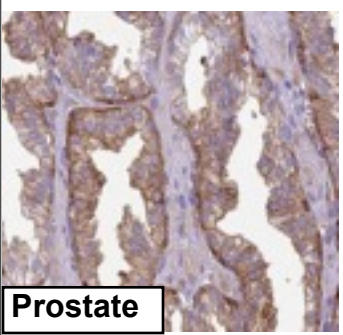
HSPB1-2

Full name: Heat shock protein beta-1
Protein existence: evidence at protein level
Function: Involved in stress resistance and actin organization.
Subcellular location: Cytoplasm. Nucleus. Cytoplasm; Cytoskeleton; Spindle. *NOTE*: Cytoplasmic in interphase cells. Colocalizes with mitotic spindles in mitotic cells. Translocates to the nucleus during heat shock and resides in sub-nuclear structures known as SC35 speckles or nuclear splicing speckles.
Tissue specificity: Detected in all tissues tested: skeletal muscle, heart, aorta, large intestine, small intestine, stomach, esophagus, bladder, adrenal gland, thyroid, pancreas, testis, adipose tissue, kidney, liver, spleen, cerebral cortex, blood serum and cerebrospinal fluid. Highest levels are found in the heart and in tissues composed of striated and smooth muscle.

Three antibodies: HSPB1-1, HSPB1-2 and HSPB1-3 were tested. All three antibodies were approved for IHC. HSPB1-2 was selected for full protein profiling.

HSPB1-2 (CAB047331) OK

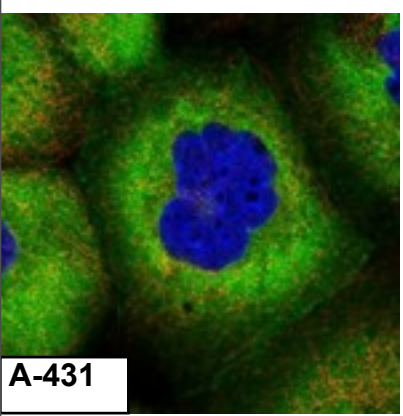
Immunohistochemistry


Prostate

IHC protocol: HIER pH 6, Dilution 1:22000
IHC test staining: Strong cytoplasm in several tissues, strongest in squamous epithelia, placenta

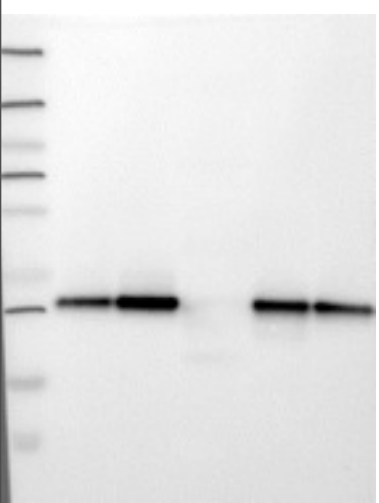
IHC Annotators comments

Squamous epithelia, urinary bladder, fallopian tube, prostate, epididymis and seminal vesicle exhibited strong cytoplasmic immunoreactivity. Moderate positivity was observed in respiratory epithelia, gastrointestinal tract, renal tubules, placenta, Purkinje cells, myocytes, adrenal and thyroid glands. Remaining normal tissues were negative.


A-431

Immunofluorescence

IF Overlay: antibody (green), anti-tubuline (red) and DAPI (blue)
IF Localisation: Staining of cytoplasm and plasma membrane in all three cell lines.
IF Validation: The subcellular location is partly supported by literature or no literature is available.



Western blot

WB Size markers (kDa): 250, 130, 95, 72, 55, 36, 28, 17, 11
WB Lanes: Marker(1), RT-4(2), U251 MG(3), Plasma(4), Liver(5), Tonsil(6)
WB Target weight (kDa): 4, 23, 19, 20
WB Validation: Supportive (Single band corresponding to the predicted size in kDa (+/-20%))