For Research Use Only

PLEC Recombinant antibody, PBS Only (Capture/Detector)

Catalog Number:83898-1-PBS



Purification Method:

CloneNo.:

240891A10

Protein A purification

Basic Information

Catalog Number: GenBank Accession Number:

83898-1-PBS NM_201380

Size: GeneID (NCBI): 100ug , Concentration: 1 mg/ml by 5339

Nanodrop; UNIPROT ID:
Source: Q15149
Rabbit Full Name:

Isotype: plectin 1, intermediate filament

IgG binding protein 500kDa

Immunogen Catalog Number: Calculated MW: AG29418 532 kDa

Observed MW: 510 kDa

Applications

Tested Applications:

WB, IF/ICC, Cytometric bead array, Sandwich ELISA,

Indirect ELISA, Sample test

Species Specificity:

human

Product Information

83898-1-PBS targets PLEC as part of a matched antibody pair:

MP00839-2: 83898-1-PBS capture and 83898-2-PBS detection (validated in Cytometric bead array)

 $MP00839\text{-}3\text{:}~83898\text{-}1\text{-}PBS~capture~and}~83898\text{-}3\text{-}PBS~detection~(validated~in~Cytometric~bead~array)}$

MP00839-4: 83898-4-PBS capture and 83898-1-PBS detection (validated in Sandwich ELISA)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

Background Information

Plectin is a large (≥500-kDa) protein that is normally expressed in various tissues including skin, muscle, and brain. It binds to a number of cytoskeletal proteins including microtubules and intermediate filaments and is involved in establishment and dynamic modulation of the cytoskeletal network. In normal cells, it plays a crucial role in cytoskeleton network organization. In keratinocytes, plectin is concentrated at the basal surface, where it links intermediate filaments to the cytoplasmic domain of transmembrane glycoproteins such as integrin beta-4. (PMID: 24218614, PMID: 28281696, PMID: 23750011)

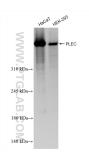
Storage

Storage: Store at -80°C. Storage Buffer: PBS Only

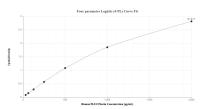
Selected Validation Data



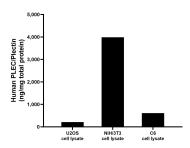
A431 cells were subjected to SDS PAGE followed by western blot with 83898-1-RR (PLEC antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83898-1-PBS in a different storage buffer formulation.



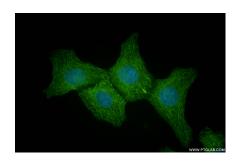
Various lysates were subjected to SDS PAGE followed by western blot with 83898-1-RR (PLEC antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83898-1-PBS in a different storage buffer formulation.



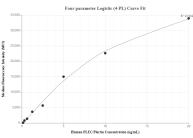
Sandwich ELISA standard curve of MP00839-4, Human PLEC/Plectin Recombinant Matched Antibody Pair - PBS only. 83898-4-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag29418. 83898-1-PBS was HRP conjugated as the detection antibody. Range: 31.25-2000 pg/mL



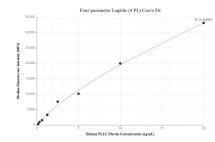
U2OS cell lysate, NIH/3T3 cell lysate and C6 cell lysate were measured. The human PLEC/Plectin concentration was determined to be 212.14 ng/mg total protein in U2OS cell lysate, 3,895.97 ng/mg total protein in NIH/3T3 cell lysate and 609.19 ng/mg total protein in C6 cell lysate.



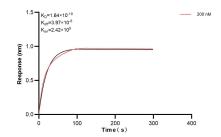
Immunofluorescent analysis of (-20°C Methanol) fixed A431 cells using PLEC antibody (83898-1-RR, Clone: 240891A10) at dilution of 1:500 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 83898-1-PBS in a different storage buffer formulation.



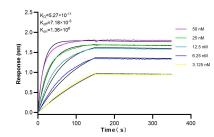
Cytometric bead array standard curve of MP00839-2, PLEC Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83898-1-PBS. Detection antibody: 83898-2-PBS. Standard: Ag29418. Range: 0.156-20 ng/mL



Cytometric bead array standard curve of MP00839-3, PLEC Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83898-1-PBS. Detection antibody: 83898-3-PBS. Standard: Ag29418. Range: 0.156-20 ng/mL



Biolayer interferometry (BLL) kinetic assay of 83898-1-PBS against Human PLEC was performed. The affinity constant is 0.164 nM.



Biolayer interferometry (BLL) kinetic assays of 83898-1-RR against Human PLEC were performed. The affinity constant is 52.7 pM.