For Research Use Only

## YTHDC2 Recombinant antibody, PBS Only (Detector)

Catalog Number:83970-1-PBS



**Purification Method:** 

CloneNo.:

241123A9

Protein A purification

**Basic Information** 

Catalog Number: GenBank Accession Number:

83970-1-PBS BC 137285

Size: GeneID (NCBI): 100ug , Concentration: 1 mg/ml by 64848

Nanodrop; UNIPROT ID:
Source: Q9H6S0
Rabbit Full Name:

Isotype: YTH domain containing 2

IgG Observed MW:
Immunogen Catalog Number: 160 kDa

AG26690

**Applications** 

**Tested Applications:** 

WB, IHC, FC (Intra), Cytometric bead array, Sandwich

ELISA, Indirect ELISA, Sample test

Species Specificity:

human, mouse

**Product Information** 

83970-1-PBS targets YTHDC2 as part of a matched antibody pair:

MP00893-1: 83970-4-PBS capture and 83970-1-PBS detection (validated in Cytometric bead array)

MP00893-3: 83970-3-PBS capture and 83970-1-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.

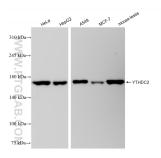
**Background Information** 

YTHDC2, also named as Probable ATP-dependent RNA helicase YTHDC2, is a 1430 amino acid protein, which belongs to the DEAD box helicase family. YTHDC2 specifically recognizes and binds N6-methyladenosine (m6A)-containing RNAs. M6A is a modification present at internal sites of mRNAs and some non-coding RNAs and plays a role in the efficiency of mRNA splicing, processing and stability.

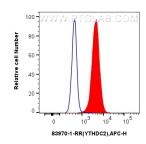
Storage

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

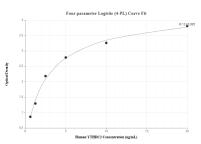
## Selected Validation Data



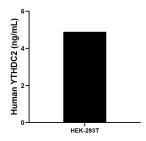
Various lysates were subjected to SDS PAGE followed by western blot with 83970-1-RR (YTHDC2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83970-1-PBS in a different storage buffer formulation.



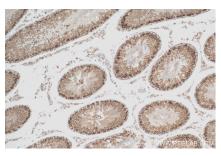
1x10^6 HepG2 cells were intracellularly stained with 0.25 ug YTHDC2 Recombinant antibody (83970-1-RR, Clone:241123A9) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 83970-1-PBS in a different storage buffer formulation.



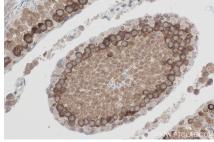
Sandwich ELISA standard curve of MP00893-3, Human YTHDC2 Recombinant Matched Antibody Pair - PBS only. 83970-3-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag26690. 83970-1-PBS was HRP conjugated as the detection antibody. Range: 0.625-20 ng/mL



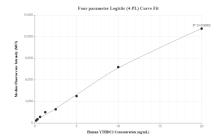
The mean YTHDC2 concentration was determined to be 4.89 ng/mLin HEK-293T cell extract based on a 1.4 mg/mL extract load.



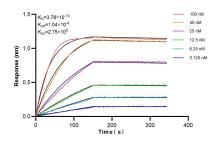
Immunohistochemical analysis of paraffinembedded rat testis tissue slide using 83970-1-RR (YTHDC2 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83970-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded rat testis tissue slide using 83970-1-RR (YTHDC2 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83970-1-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP00893-1, YTHDC2 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83970-4-PBS. Detection antibody: 83970-1-PBS. Standard: Ag26690. Range: 0.156-20 ng/mL



Biolayer interferometry (BLL) kinetic assays of 83970-1-RR against Human YTHDC2 were performed. The affinity constant is 0.378 nM.