## Recombinant YTHDC1 protein

## A C T I V E 🚺 M O T I F®

## Catalog No: 81176 Lot No: 19218001 Expressed In: Baculovirus

Quantity: 20 µg Concentration: 0.3 µg/µl Source: Human

**Buffer Contents:** Recombinant YTHDC1 protein is supplied in 25 mM HEPES-NaOH pH 7.5, 300 mM NaCl, 10% glycerol, 0.04% Triton X-100, 0.5 mM TCEP.

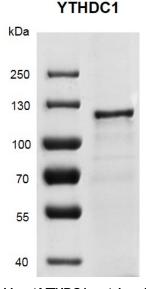
**Background:** YTHDC1 (YTH Domain Containing 1), is a regulator of alternative splicing that specifically recognizes and binds N6-methyladenosine (m6A)-containing RNAs. M6A is a modification present at internal sites of mRNAs and some non-coding RNAs and plays a role in the efficiency of mRNA splicing, processing and stability. YTHDC1 acts as a key regulator of exon-inclusion or exon-skipping during alternative splicing via interaction with mRNA splicing factors SRSF3

and SRSF10. It specifically binds m6A-containing mRNAs and promotes recruitment of SRSF3 to its mRNA-binding elements adjacent to m6A sites, leading to exon-inclusion during alternative splicing. In contrast, interaction with SRSF3 prevents interaction with SRSF10, a splicing factor that promotes exon skipping: this prevents SRSF10 from binding to its mRNA-binding sites close to m6A-containing regions, leading to inhibit exon skipping during alternative splicing. YTHDC1 may also regulate alternative splice site selection.

**Protein Details:** Recombinant YTHDC1 protein was expressed in a baculovirus expression system as the full length protein (accession number NP\_001026902.1) with an N-terminal Flag tag. The molecular weight of the protein is 85.6 kDa

**Application Notes:** Recombinant YTHDC1 protein is suitable for use in the study of binding assay, inhibitor screening, and selectivity profiling.

**Storage and Guarantee:** Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is for research use only and is not for use in diagnostic procedures. This product is guaranteed for 6 months from date of arrival.



Recombinant YTHDC1 protein gel 7.5% SDS-PAGE Coomassie staining MW: 85.6 kDa Purity: >85%