

Recombinant Human NCOA7 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50702

Size: 10ug, 100ug

Protein Name: Nuclear receptor coactivator 7 (140 kDa estrogen receptor-associated protein)
(Estrogen nuclear receptor coactivator 1)

Synonym: NCOA7, ERAP140, ESNA1, Nbla00052, Nbla10993

UniProt ID: Q8NI08

UniProt Link: www.uniprot.org/uniprotkb/Q8NI08/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 942 AA

Molecular Weight: 106 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MDTKEEKKERKQSYFARLKKKKQAKQNAETASAVATRTHTGKEDNNTVVLEPDKCNIAVEEEYMTD
EKKKRKSNQLKEIRTELKRYYSIDDNQNKTHDKKEKMMVVQKPHGTMETAGNQDTLNSIALKFNI
TPNKLVELNKLFTHTIVPGQVLFVPDANSPSSTLRLSSSSPGATVSPSSSDAEYDKLPDADLARKALK
PIERVLSSSTSEDEPGVVKFLKMNCRYFTDGKGVVGGVMIVTPNNIMFDPHKSDPLVIENGCEEYGLI
CPMEEVVSIALYNDISHMKIKDALPSDLPQDLCPLYRPGEWEDLASEKDINPFSKFKSINKEKRQONG
EKIMTSDSRPIVPLEKSTGHTPTKPSGSSVSEKLKKLDSSRETSHGSPTVTKLSKEPSDTSSAFESTA
KENFLGEDDDFVDLEELSSQTGGGMHKKDTLKECLSLDPEERKKAESQINNSAVEMQVQSALAFGLG
TENDVELKGALDLETCEKQDIMPEVDKQSGSPESRVENTLNIHEDLDKVKLIEYYLTKNKEGPQVSEN
LQKTELSDGKSIEPGGIDITLSSSLSQAGDPITEGNKEPKDTWVKKGEPPLPVKLNSTEANVIKEALDS
SLESTLDNSCQGAQMDNKSEVQLWLLKRIQVPIEDILPSKEEKSKTPPMFLCIKVGKPMRKSFATHTA
AMVQQYGKRRKQPEYWFAVPRERVDHLYTFFVQWSPDVYGKDAKEQGFVVVEKEELNMIDNFFSE
PTTKSWEIITVEEAKRRKSTCSYYEDEDEEVLPLVRPHSALLENMHIEQLARRLPARVQGYPWRLAY
STLEHGTSLKTLRYKSASLDSPVLLVIKMDMNQIFGAYATHPFKFSHDHYYGTGETFLYTFSPHFKVFK
WSGENSYFINGDISSLELGGGGGRFGLWLADLYHGRSNSCSTFNNDILSKKEDFIVQDLEVWAFD

3. Buffer Composition



Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Nuclear receptor coactivator 7 (140 kDa estrogen receptor-associated protein) (Estrogen nuclear receptor coactivator 1) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Transcriptional coactivator which enhances the transcriptional activities of several nuclear receptors including ESR1, THRB, PPARG and RARA (PubMed:11971969). Inhibits the activity of the vacuolar-type ATPase (V-ATPase) by inducing disassembly of the V-ATPase complex (PubMed:38593795). Protects the Golgi apparatus lumen from excess acidification by inhibiting V-ATPase ATP hydrolytic activity through interaction with V-ATPase catalytic subunit ATP6V1A, maintaining optimal conditions for glycosylation enzymes (By similarity). Required to stabilize V-ATPase V1 subunits ATP6V1B2 and ATP6V1A at membrane sites (By similarity). Involved in protection against oxidative damage (PubMed:17391516, PubMed:25330068). Involved in urine acidification (By similarity).; [Isoform 1]: Exhibits oxidation resistance activity (PubMed:25330068). Protects neuronal cells from oxidative stress with weaker neuroprotective activity than isoform 5 (By similarity).; [Isoform 5]: Exhibits oxidation resistance activity (PubMed:25330068). Protects neuronal cells from oxidative stress with stronger neuroprotective activity than isoform 1 (By similarity). Inhibits endosome-mediated viral entry by inhibiting fusion of the viral and endosomal membranes and subsequent nuclear translocation of viral ribonucleoproteins (PubMed:30478388). Promotes increased cytoplasmic vesicular acidification, lysosomal protease activity and the degradation of endocytosed material (PubMed:30478388).

Subcellular Localization: Nucleus . Cytoplasm . Golgi apparatus, cis-Golgi network membrane ; Peripheral membrane protein . Golgi apparatus, trans-Golgi network membrane ; Peripheral membrane protein . Note=Predominantly nuclear following estradiol stimulation (PubMed:17391516). Localizes to the nucleus and cytoplasm in the absence of estradiol (PubMed:17391516). Recruited to the cis-Golgi network and trans-Golgi network membranes in a Rab-dependent manner (By similarity).; [Isoform 5]: Cytoplasm .

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.