SANTA CRUZ BIOTECHNOLOGY, INC.

elF3 p110 (H-220): sc-28858



BACKGROUND

Translation initiation in eukaryotes necessitates the assembly of an 80S ribosomal complex containing methionyl initiator tRNA (Met-tRNAiMet), which is base paired at the initiation codon (AUG, GUG) in eligible transcripts. Eukaryotic initiation factors (eIFs) are utilized in a sequence of reactions that leads to 80S ribosomal assembly and initiation of translation. Eukaryotic initiation factor-3 (eIF3) is the largest family of eIFs and consists of at least ten unique subunits (p170, p116, p110, p66, p48, p47, p44, p40, p36, and p35) in mammals. eIF3 subunit-9 (eIF3- η , eIF3-p116, p116, eIF3-S9, PRT1) is a 873 amino acid component of the eIF3 multi-subunit complex that is involved in ribosomal 48S complex formation. Association of the eIF3 complex with the 40S ribosomal subunit stabilizes eIF2-GTP-Met-tRNAiMet complex association and mRNA binding, and promotes dissociation of 80S ribosomes into 40S and 60S subunits.

CHROMOSOMAL LOCATION

Genetic locus: EIF3C/EIF3CL(human) mapping to 16p11.2; Eif3c (mouse) mapping to 7 F3.

SOURCE

elF3 p110 (H-220) is a rabbit polyclonal antibody raised against amino acids 611-761 mapping within an internal region of elF3 p110 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

eIF3 p110 (H-220) is recommended for detection of eIF3 p110 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

eIF3 p110 (H-220) is also recommended for detection of eIF3 p110 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for eIF3 p110 siRNA (h): sc-40545, eIF3 p110 siRNA (m): sc-40546, eIF3 p110 shRNA Plasmid (h): sc-40545-SH, eIF3 p110 shRNA Plasmid (m): sc-40546-SH, eIF3 p110 shRNA (h) Lentiviral Particles: sc-40545-V and eIF3 p110 shRNA (m) Lentiviral Particles: sc-40546-V.

Molecular Weight of elF3 p110: 110 kDa.

Positive Controls: MIA PaCa-2 cell lysate: sc-2285, JAR cell lysate: sc-2276 or JEG-3 whole cell lysate: sc-364255.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

DATA





eIF3 p110 (H-220): sc-28858. Western blot analysis of eIF3 p110 expression in JAR (\bf{A}) and JEG-3 (\bf{B}) whole cell lysates and mouse placenta tissue extract (\bf{C}).



eIF3 p110 (H-220): sc-28858. Immunofluorescence staining of normal mouse intestine frozen section showing cytoplasmic staining.



eIF3 p110 (H-220): sc-28858. Western blot analysis of eIF3 p110 expression in 293T $({\bm A})$ and MIA PaCa-2 $({\bm B})$ whole cell lysates.

elF3 p110 (H-220): sc-28858. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

- 1. Weinlich, S., et al. 2009. IGF2BP1 enhances HCV IRES-mediated translation initiation via the 3'UTR. RNA 15: 1528-1542.
- 2. Geissler, R., et al. 2012. The DEAD-box helicase DDX3 supports the assembly of functional 80S ribosomes. Nucleic Acids Res. 40: 4998-5011.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **eIF3 p110 (B-6): sc-74507**, our highly recommended monoclonal aternative to eIF3 p110 (H-220).