**BACKGROUND**

The initiation of protein synthesis in eukaryotic cells is regulated by interactions between protein initiation factors and RNA molecules. The eukaryotic initiation complex elf4F exists \textit{in vitro} as a trimeric complex of elf4G, elf4E, and elf4A. Together, the complex allows ribosome binding to mRNA by inducing the unwinding of mRNA secondary structures. elf4E binds to the mRNA "cap" during an early step in the initiation of protein synthesis. elf4A acts as an ATP-dependent RNA helicase. elf4G acts as a bridge between elf4E, elf4A, and the elf3 complex.

**CHROMOSOMAL LOCALIZATION**

Genetic locus: EIF4G1 (human) mapping to 3q27.1; Eif4g1 (mouse) mapping to 16 B1.

**SOURCE**

eIF4G (A-10) is a mouse monoclonal antibody raised against amino acids 1-300 of elf4G of human origin.

**PRODUCT**

Each vial contains 200 µg IgG2b kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

eIF4G (A-10) is available conjugated to agarose (sc-133155 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-133155 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-133155 PE), fluorescein (sc-133155 FITC), Alexa Fluor® 488 (sc-133155 AF488), Alexa Fluor® 546 (sc-133155 AF546), Alexa Fluor® 594 (sc-133155 AF594) or Alexa Fluor® 647 (sc-133155 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-133155 AF680) or Alexa Fluor® 790 (sc-133155 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**APPLICATIONS**

elf4G (A-10) is recommended for detection of elf4G of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).


Molecular Weight of elf4G: 200-250 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, Neuro-2A whole cell lysate: sc-364185 or A-431 whole cell lysate: sc-2201.

**STORAGE**

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

**DATA**

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

**PROTOCOLS**

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