

GAL4 (DBD) (RK5C1): sc-510

BACKGROUND

The GAL4 protein of *Saccharomyces cerevisiae* is one of the most thoroughly characterized transcriptional activators. Since the N-terminal 147 amino acid residues of GAL4 are sufficient to mediate specific and strong binding to DNA, but are incapable of efficient transcriptional activation, this protein fragment has frequently been used to confer specific DNA binding in experiments examining transcriptional activation functions of heterologous proteins. This approach is facilitated by the finding that higher eukaryotes lack endogenous proteins that enhance transcription from the consensus GAL4-binding site. Fusions between GAL4 (an amino acid sequence) and activating domains from a variety of transcriptional regulatory proteins can activate transcription in yeast, plant, insects and mammalian cells. A unique "two-hybrid" system has been developed using GAL4 fusions in yeast to identify specific protein-protein interactions.

SOURCE

GAL4 (DBD) (RK5C1) is a mouse monoclonal antibody raised against amino acids 94-147 of GAL4.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-510 X, 200 µg/0.1 ml.

GAL4 (DBD) (RK5C1) is available conjugated to agarose (sc-510 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-510 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-510 PE), fluorescein (sc-510 FITC), Alexa Fluor[®] 488 (sc-510 AF488), Alexa Fluor[®] 546 (sc-510 AF546), Alexa Fluor[®] 594 (sc-510 AF594) or Alexa Fluor[®] 647 (sc-510 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-510 AF680) or Alexa Fluor[®] 790 (sc-510 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

In addition, GAL4 (DBD) (RK5C1) is available conjugated to biotin (sc-510 B), 200 µg/ml, for WB, IHC(P) and ELISA.

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APPLICATIONS

GAL4 (DBD) (RK5C1) is recommended for detection of GAL4 DNA binding domain by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

GAL4 (DBD) (RK5C1) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of GAL4: 99 kDa.

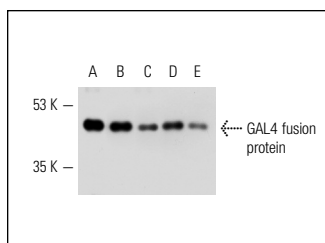
STORAGE

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

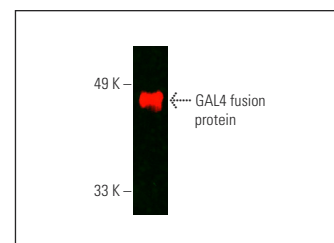
RESEARCH USE

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

DATA



Western blot analysis of GAL4 (DBD) 1-147: sc-4050 tagged fusion protein (20 ng). Antibodies tested include GAL4 (DBD) (RK5C1): sc-510 tested at 1.0 µg/ml (A), 0.1 µg/ml (B) and 0.01 µg/ml (C) and GAL4 (DBD): sc-577 tested at 0.1 µg/ml (D) and 0.01 µg/ml (E).



GAL4 (DBD) (RK5C1) Alexa Fluor[®] 790: sc-510 AF790. Direct near-infrared western blot analysis of human recombinant GAL4 fusion protein. Blocked with UltraCruz[®] Blocking Reagent: sc-516214.

SELECT PRODUCT CITATIONS

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- Sánchez-Tilló, E., et al. 2015. ZEB1 and TCF4 reciprocally modulate their transcriptional activities to regulate Wnt target gene expression. *Oncogene* 34: 5760-5770.
- Heir, P., et al. 2016. Oxygen-dependent regulation of erythropoietin receptor turnover and signaling. *J. Biol. Chem.* 291: 7357-7372.
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PROTOCOLS

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