SANTA CRUZ BIOTECHNOLOGY, INC.

EYA2 (m): 293T Lysate: sc-126819

BACKGROUND

A gene on chromosome 20q13.1 encodes EYA2 (eyes absent). EYA2 is one of four members of the eyes absent family. A 271 amino acid domain at the carboxy-terminal is highly conserved amongst the members of the eyes absent family, while the PST (proline-serive-threonin)-rich amino-terminal is highly divergent. EYA2 is expressed relatively late in development in the cytoplasm of extensor tendons and ligaments of the phalangeal elements of the limb, cranial placodes, branchial arches, central nervous system and the developing eye. Pax-3 induces the expression of EYA2 in a cascade that is necessary and sufficient for myogenesis. EYA2, like EYA1, acts as a transcriptional activator in connective tissue patterning through its PST domain, which functions as a transactivation domain. EYA2 is translocated to the nucleus by Six proteins, which interact through their domain and homeodomain with EYA2. EYA2 carboxy-terminal interacts with the $G_{\alpha\zeta}$ and $G_{\alpha i2}$ proteins. This interaction prevents Six proteins from translocating EYA2 to the nucleus.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Eya2 (mouse) mapping to 2 H3.

PRODUCT

EYA2 (m): 293T Lysate represents a lysate of mouse EYA2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

EYA2 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive EYA2 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

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.