

# EOLA1 (A-14): sc-167753

## BACKGROUND

EOLA1 (endothelial-overexpressed lipopolysaccharide-associated factor 1), also known as CXorf40A, CXorf40 or FLJ52212, is a 158 amino acid protein that may have a role in cell protection during an inflammation reaction. EOLA1 is expressed at high levels in skeletal muscle, liver, kidney, heart and placenta, with lower expression found in colon, small intestine and spleen. EOLA1 interacts with Metallothionein 2A, a member of the Metallothionein family. Metallothioneins are a group of ubiquitous low-molecular-weight proteins that have functional roles in cell growth, repair and differentiation. Due to their essential role in the protection of cells against the toxicity of cadmium, mercury, and copper, metallothioneins are implicated primarily in metal ion detoxification. Metallothionein, as an acute phase or stress-response protein and free radical scavenger, is related to inflammation and cellular protection from reactive forms of oxygen, ionizing radiation, pharmacological agents and mutagens. Metallothioneins are known to be broadly expressed in heart, liver, kidney, breast and testis tissue.

## REFERENCES

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4. Liang, Z., et al. 2004. Identification and characterization of a novel gene EOLA1 stimulating ECV304 cell proliferation. *Biochem. Biophys. Res. Commun.* 325: 798-802.
5. Cai, Z., et al. 2005. Purification of human endothelial overexpressed lipopolysaccharide-associated factor 1 protein. *Zhonghua Shao Shang Za Zhi* 21: 367-369.
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7. Wang, A.G., et al. 2006. Identification of intrahepatic cholangiocarcinoma related genes by comparison with normal liver tissues using expressed sequence tags. *Biochem. Biophys. Res. Commun.* 345: 1022-1032.
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## CHROMOSOMAL LOCATION

Genetic locus: CXorf40A/CXorf40B (human) mapping to Xq28; 1110012L19Rik (mouse) mapping to X A7.1.

## SOURCE

EOLA1 (A-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of EOLA1 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-167753 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

EOLA1 (A-14) is recommended for detection of CXorf40A and EOLA1 of human origin, 1110012L19Rik of mouse origin and RGD1562747 of rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

EOLA1 (A-14) is also recommended for detection of EOLA1 in additional species, including equine.

Suitable for use as control antibody for EOLA1 siRNA (h): sc-91055, 1110012L19Rik siRNA (m): sc-108152, EOLA1 shRNA Plasmid (h): sc-91055-SH, 1110012L19Rik shRNA Plasmid (m): sc-108152-SH, EOLA1 shRNA (h) Lentiviral Particles: sc-91055-V and 1110012L19Rik shRNA (m) Lentiviral Particles: sc-108152-V.

Molecular Weight of EOLA1: 18 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.