

# EPAG (V-15): sc-167758

## BACKGROUND

EPAG (early lymphoid activation gene protein) is a 149 amino acid protein expressed in heart, kidney, lung, and skeletal muscle, with lower levels in pancreas and liver. EPAG is suggested to function as an early signal for the activation of T cells. The gene encoding EPAG maps to human chromosome Xq21. Chromosome X consists of about 153 million base pairs and nearly 1,000 genes. In conjunction with chromosome Y, chromosome X is responsible for sex determination. There are a number of conditions related to an abnormal number and combination of sex chromosomes, some of which include Turner's syndrome, color blindness, hemophilia which affect males more frequently as males carry a single X chromosome.

## REFERENCES

1. Bennett, J.S., et al. 1994. Properties of a novel gene isolated from a Hodgkin's disease cell line that is expressed early during lymphoid cell activation. *J. Immunol.* 152: 2229-2240.
2. Zhuchenko, O., et al. 1996. Isolation, mapping, and genomic structure of an X-linked gene for a subunit of human mitochondrial complex I. *Genomics* 37: 281-288.
3. Gianfrancesco, F., et al. 2001. Differential divergence of three human pseudoautosomal genes and their mouse homologs: implications for sex chromosome evolution. *Genome Res.* 11: 2095-2100.
4. Bernardino-Sgherri, J., et al. 2002. Overall DNA methylation and chromatin structure of normal and abnormal X chromosomes. *Cytogenet. Genome Res.* 99: 85-91.
5. Ross, M.T., et al. 2005. The DNA sequence of the human X chromosome. *Nature* 434: 325-337.

## CHROMOSOMAL LOCATION

Genetic locus: EPAG (human) mapping to Xq21.33.

## SOURCE

EPAG (V-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of EPAG 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-167758 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## PROTOCOLS

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

## APPLICATIONS

EPAG (V-15) is recommended for detection of EPAG of human 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).

Molecular Weight of EPAG: 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.

## RESEARCH USE

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