

## DESCRIPTION

|                                                                                                                                                                                                         |                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human                                                                               |
| <b>Specificity</b>                                                                                                                                                                                      | Detects human CapG in direct ELISAs and Western blots.                              |
| <b>Source</b>                                                                                                                                                                                           | Polyclonal Sheep IgG                                                                |
| <b>Purification</b>                                                                                                                                                                                     | Antigen Affinity-purified                                                           |
| <b>Immunogen</b>                                                                                                                                                                                        | <i>E. coli</i> -derived recombinant human CapG<br>Met1-Lys348<br>Accession # P40121 |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 405<br>Excitation Wavelength: 405 nm<br>Emission Wavelength: 421 nm     |
| <b>Formulation</b>                                                                                                                                                                                      | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide                        |
| *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |                                                                                     |

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

|                            |                                                                        |
|----------------------------|------------------------------------------------------------------------|
| <b>Western Blot</b>        | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunocytochemistry</b> | Optimal dilution of this antibody should be experimentally determined. |

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## BACKGROUND

CapG ("Caps" barbed actin ends and resembles Gelsolin; also Macrophage capping protein/MCP and actin regulatory protein Cap-G) is a 40-42 kDa member of the Villin/Gelsolin family of proteins. It is expressed by macrophages/monocytes and endothelial cells, and is found in both cytoplasm and nucleus. It appears to be involved in cell motility, and is known to bind to (but not cleave) actin filament ends in a calcium-dependent manner. This regulates the growth of actin filaments. Human CapG is 348 amino acids (aa) in length. It contains an N-terminal gelsolin repeat (aa 27-75), followed by a NLS (aa 137-146), two consecutive gelsolin-like repeats (aa 148-188 and 261-307), and one utilized phosphorylation site at Ser337. There is at least one potential isoform variant that contains a deletion of aa 64-84. Full-length human CapG shares 91% aa sequence identity with mouse CapG.

## PRODUCT SPECIFIC NOTICES

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