

## DESCRIPTION

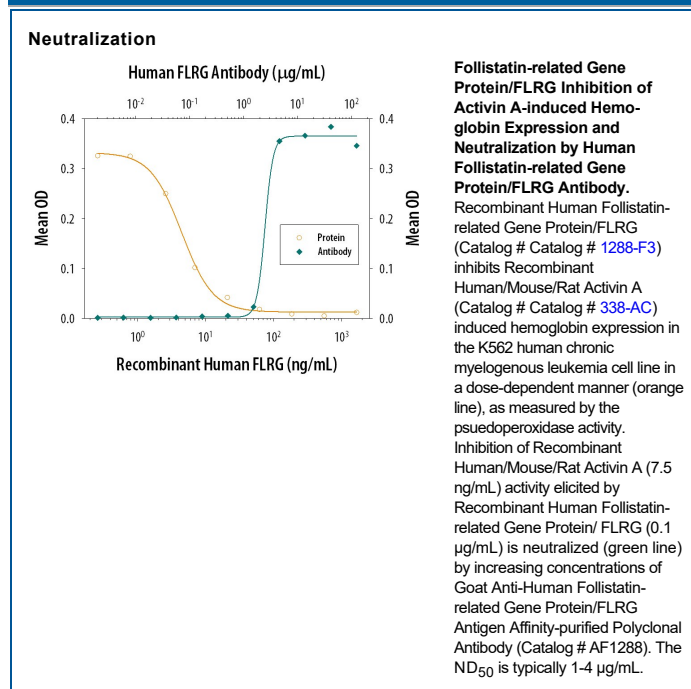
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects Follistatin-related Gene Protein/FLRG in direct ELISAs and Western blots. In direct ELISAs, approximately 40% cross-reactivity with recombinant mouse FLRG is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human FLRG Met27-Val263 Accession # O95633
<b>Endotoxin Level</b>	<0.10 EU per 1 µg of the antibody by the LAL method.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

## 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>Neutralization</b>	Measured by its ability to neutralize Follistatin-related Gene Protein/FLRG inhibition of Activin A-dependent hemoglobin expression in the K562 human chronic myelogenous leukemia cell line. The Neutralization Dose (ND <sub>50</sub> ) is typically 1-4 µg/mL in the presence of 0.1 µg/mL Recombinant Human Follistatin-related Gene Protein/FLRG and 7.5 ng/mL Recombinant Human/Mouse/Rat Activin A.
<b>ELISA</b>	<b>ELISA detection</b> - This antibody can be used as a detection reagent in a human FLRG sandwich immunoassay in combination with the human FLRG capture reagent (Cat. # MAB1288) and recombinant human FLRG (Cat. # 1288-F3) as the standard. The suggested concentration range for this detection reagent is 0.1 - 0.4 µg/mL and should be titrated to determine the optimal concentration. In this format, less than 1% cross-reactivity is observed with rmFLRG.

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Follistatin-related gene protein (FLRG), also known as follistatin-like 3 (FSTL3) is a glycoprotein belonging to the follistatin-module protein family. Human FLRG cDNA encodes a 263 amino acid (aa) residue protein with a putative 26 aa signal peptide, an N-terminal domain, two cysteine-rich follistatin-like domains (FS) and a C-terminal acidic domain. Compared to follistatin, FLRG lacks the third FS domain found in follistatin. In addition, FLRG also lacks the heparin-binding domain found within the first amino-terminal FS domain of follistatin. Mouse and human FLRG share approximately 83% aa sequence homology. Like follistatin, FLRG has been shown to bind and inhibit the activities of TGF- $\beta$  family ligands including activin, BMP-2, -6, -7 and GDF-8/myostatin. While both FLRG and follistatin are located in a wide and overlapping range of adult and fetal tissue, their sites of peak expression differ: FLRG most highly in heart, lung, kidney, placenta and testis, while follistatin is highest in ovary and pituitary. The expression of FLRG is upregulated by TGF- $\beta$  and activin signaling through Smad proteins. Although FLRG is a secreted protein in many cell types, it has also been localized to the nuclear compartment in HeLa, 293 and CHO cells (1-5).

## References:

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2. Sidis, Y. *et al.* (2002) Endocrinology **143**:1613.
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4. Hill, J. *et al.* (2002) J. Biol. Chem. **277**:40735.
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