

## **Product datasheet for DA3556**

## **Procine ECGF (Cell Culture Grade)**

## **Product data:**

**Product Type:** Native Proteins

**Description:** Procine ECGF (Cell Culture Grade) protein, 6 mg

Species: Porcine
Protein Source: Brain

**Purity:** Crude extract

**Buffer:** Presentation State: Extract

State: Lyophilized (Sterile Freeze dried) Crude extract

Buffer System: H2O without preservatives

**Bioactivity:** Biological: Optimum concentration for human umbilical vein endothelial cells (HUVEC) range

from 50-200 µg/ml, optimal concentration with heparin (50 µg/ml) is about 12 µg/ml.

**Reconstitution Method:** Restore the contents of the vial in 2 ml of prewarmed (37°C) sterile balanced salt solution.

Gently rotate the vial until the contents are dissolved. This stock solution may be further diluted in sterile tissue culture media to obtain the desired working concentrations. Although

the stock solution can be added aseptically to sterile tissue culture medium, it is

recommended that medium containing diluted product is aseptically filtered prior to use. NOTE: Because ECGF is a crude extract it might be that the solution is not fully clear after

reconstitution. However this has no influence on the activity!

6 mg of ECGF are sufficient for 500 ml medium.

**Preparation:** Lyophilized (Sterile Freeze dried) Crude extract



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**Applications:** Porcine ECGF is effective on Mouse, Bovine, Porcine and Human cells.

Protocol: - plate cells with a density at 5-7 x 10e3 cells/well in growth medium (EGM)

- incubate cells over night [if urgent, plate cells in the morning, change growth medium against basal medium (EBM) in the early afternoon]
- change EGF against EBM (for HUVEC: EBM +1-2% FCS)
- incubate 24h change medium again and add factors (growth factors, inhibitors, etc)
- incubate for 18h add 10µl 3H-Thymidine solution [0.025mCi/ml] per well (=0.25µCi)
- incubate another 6h at 37°C
- Washing steps: (250µl/well)

PBS 1x

MeOH 2x 5min TCA 2x 10min H2O 1x

- lyse cells in 250µl 0.3M NaOH per well
- transfer 2.5 ml ECO Plus into the appropriate scintillation vials
- transfer cell lysats into the scintillation vials count by liquid scintillation (beta-counter;

**Beckmann Instruments)** 

**Protein Description:** Porcine Endothelial Cell Growth Factor (ECGF) (Cell Culture Grade).

**Storage:** Store lyophilized at 2-8°C for 6 months or at -20°C long term.

After reconstitution store the antibody undiluted at 2-8°C for one month

or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing.

**Stability:** Shelf life: one year from despatch.

**RefSeq:** <u>NP 000791</u>

**Locus ID:** 2246 **Cytogenetics:** 5q31.3

Synonyms: FGFA, Acidic fibroblast growth factor, ECGF-beta, HBGF-1, HBGF1

**Summary:** The protein encoded by this gene is a member of the fibroblast growth factor (FGF) family.

FGF family members possess broad mitogenic and cell survival activities, and are involved in

a variety of biological processes, including embryonic development, cell growth,

morphogenesis, tissue repair, tumor growth and invasion. This protein functions as a modifier of endothelial cell migration and proliferation, as well as an angiogenic factor. It acts as a mitogen for a variety of mesoderm- and neuroectoderm-derived cells in vitro, thus is

thought to be involved in organogenesis. Multiple alternatively spliced variants encoding

different isoforms have been described. [provided by RefSeq, Jan 2009]



**Protein Families:** 

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**Protein Pathways:** 

MAPK signaling pathway, Melanoma, Pathways in cancer, Regulation of actin cytoskeleton