Introduction

The 88kDa glycoprotein progranulin [1, 2] (PGRN; granulin (precursor); GRN [3-6], epithelin precursor [7, 8]; proepithelin (PEPI) [9]; PC cell-derived growth factor (PC-DGF) [10]; acrogranin [11, 12]; paragranulin) is a 593-amino acid precursor protein composed of seven granulin-like domains, which consist of highly conserved tandem repeats of a rare 12 cysteinyl motif. Individual granulin peptides are formed when progranulin is subjected to proteolytic cleavage, although the precursor is biologically active itself [13]. Progranulin has been shown to be a widely expressed pluripotent growth factor which plays a role in processes such as development, wound repair and inflammation by activating signalling cascades that control cell cycle progression and cell motility [2, 13]. Progranulin has also been linked to tumorigenesis [13, 14]. Recent interest in progranulin is focusing on its function in the central nervous system (CNS) after mutation in the progranulin gene have been identified to be the agent of frontotemporal lobar degeneration (FTLD), a common cause of dementia [15-17].


Progranulin (human) ELISA Kit
For Details see Backcover!

Progranulin (human) (rec.)
- ALX-201-377-C010 10 µg
- ALX-201-377-C050 50 µg
Produced in HEK293 cells. Signal peptide and mature human progranulin (aa 1-593) is fused at the C-terminus to a FLAG®-tag.


FIGURE 2: The effects of phospho-ERK1/2 and non phospho-ERK1/2 by Progranulin (human) (rec.) (Prod. No. ALX-201-377) in THP-1 cells.

Method: To examine the signal of phospho-p44/42 MAP kinase, reactions were carried out at 37°C over 0, 30, 60 min., respectively by adding the recombinant protein (100ng/ml) to the THP-1 monocyte cells, which were maintained with serum starvation for 24 hours. Recombinant proteins in lanes 1, 2 and 3 were subjected to THP-1 monocyte cell treatments over 0, 30, 60 min., respectively.

FIGURE 3: The effects of phospho-ERK1/2 and non phospho-ERK1/2 by Progranulin (human) (rec.) (Prod. No. ALX-201-377) in MCF10A cells.

Method: To examine the signal of phospho-p44/42 MAP kinase, reactions were carried out at 37°C over 0, 30, 60 min., respectively by adding the recombinant protein (500ng/ml) to the MCF10A human breast epithelial cells, which were maintained with serum starvation for 24 hours. Recombinant proteins in lanes 1, 2, 3 and 4 were subjected to MCF10A human breast epithelial cell treatments over 0, 30, 60 min., respectively.

Progranulin (mouse) (rec.)
- ALX-201-389-C010 10 µg
- ALX-201-389-C050 50 µg
Produced in HEK293 cells. Signal peptide and mature mouse progranulin (aa 1-589) is fused at the C-terminus to a FLAG®-tag.

PAb to Progranulin (human)
ALX-210-466-C010 100 µg
From rabbit. IMMUNOGEN: Recombinant human progranulin (proepithelin). SPECIFICITY: Recognizes human progranulin. APPLICATION: ELISA, WB.
Progranulin (human) ELISA Kit

Excellent Quality – High Sensitivity – Batch-to-Batch Reproducibility

Standard protein:
- Detection limit: 32 pg/ml
- Detection range (Standard range): 0.063 ng/ml to 4 ng/ml
- Standard curve for recombinant human progranulin

Conc. (ng/ml) vs OD at 450 nm

AG-P0731PP-Kl01 Penta Plex 5 x 96 wells
AG-P0731TP-Kl01 Twin Plex 2 x 96 wells
AG-P0731EK-Kl01  1 x 96 wells

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