Accepted Manuscript

cAMP/PKA-induced filamin A (FLNA) phosphorylation inhibits SST2 signal transduction in GH-secreting pituitary tumor cells

E. Peverelli, E. Giardino, F. Mangili, D. Treppiedi, R. Catalano, E. Ferrante, E. Sala, M. Locatelli, A.G. Lania, M. Arosio, A. Spada, G. Mantovani

PII: S0304-3835(18)30514-7

DOI: 10.1016/j.canlet.2018.08.002

Reference: CAN 14016

To appear in: *Cancer Letters*

Received Date: 10 May 2018

Revised Date: 31 July 2018

Accepted Date: 2 August 2018

Please cite this article as: E Peverelli, E Giardino, F Mangili, D Treppiedi, R Catalano, E Ferrante, E Sala, M Locatelli, A. Lania, M Arosio, A Spada, G Mantovani, cAMP/PKA-induced filamin A (FLNA) phosphorylation inhibits SST2 signal transduction in GH-secreting pituitary tumor cells, *Cancer Letters* (2018), doi: 10.1016/j.canlet.2018.08.002.

cAMP/PKA-induced filamin A (FLNA) phosphorylation inhibits SST2 signal transduction in GH-secreting pituitary tumor cells

Peverelli E[1], Giardino E[1], Mangili F[1], Treppiedi D[1], Catalano R[1,2], Ferrante E[1], Sala E[1], Locatelli M[3], Lania AG[4], Arosio M[1], Spada A[1], Mantovani G[1]

[1]Endocrinology Unit, Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico; Department of Clinical Sciences and Community Health, University of Milan, Milan, Italy;

[2] PhD Program in Endocrinological Sciences, Sapienza University of Rome, Rome, Italy;

[3]Neurosurgery Unit, Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico, Milan, Italy;

[4]Endocrine Unit, IRCCS Humanitas Clinical Institute, Rozzano, Humanitas University, Italy.

Corresponding author and person to whom reprint requests should be addressed:

Peverelli Erika, PhD

Endocrinology Unit

Fondazione IRCCS Ca' Granda - Pad.Granelli

Via F. Sforza, 35

20122-Milan, Italy

Phone +39 02 55033512

Fax +39 02 55033361

E-mail: erika.peverelli@unimi.it

Abstract

An efficient intracellular response to somatostatin analogs (SSA) in pituitary tumors requires filamin A (FLNA). Since cAMP pathway plays an important role in GH-secreting pituitary tumors pathogenesis and FLNA is phosphorylated by PKA on S2152, aim of this study was to investigate