Cellular and Molecular Life Sciences

A cellular biosensor to evaluate CRM1 nuclear export activity. Functional analysis of the cancer-related mutant E571K.

Iraia García-Santisteban¹#, Igor Arregi², Marián Alonso-Mariño², María A. Urbaneja², Juan J. Garcia-Vallejo³, Sonia Bañuelos²*, Jose A. Rodríguez¹*

¹Department of Genetics, Physical Anthropology and Animal Physiology, University of the Basque Country (UPV/EHU), Leioa Spain

Leioa, Spain.

²Unidad de Biofisica (CSIC, UPV/EHU) and Department of Biochemistry and Molecular Biology, University of the Basque Country, Leioa. Spain.

Basque Country, Leioa, Spain.

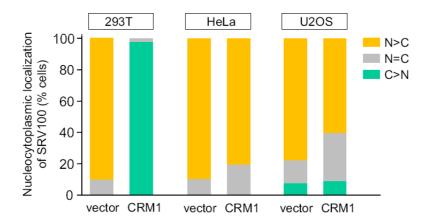
³Department of Molecular Cell Biology and Immunology, VU University Medical Center, Amsterdam, the Netherlands.

#Current Address: Division of Cell Biology I, The Netherlands Cancer Institute, Amsterdam, The Netherlands.

*Corresponding authors

E-mail: <u>sonia.banuelos@ehu.es</u> E-mail: <u>josean.rodriguez@ehu.es</u>

Supplementary Figure S1



Supplementary Figure S1. Nucleocytoplasmic localization of the SRV100 biosensor in three different cell lines when co-expressed with YFP vector (negative control) or with YFP-CRM1. Graph shows the percentage of cotransfected cells showing predominantly nuclear (N>C), nuclear and cytoplasmic (N=C) or predominantly cytoplasmic (C>N) localization of SRV100. At least 200 cells were counted per sample. Co-expression with YFP-CRM1 induced a dramatic relocalization of SRV100 to the cytoplasm of 293Tcells. In contrast, only a minor effect was observed in HeLa and U20S cells.