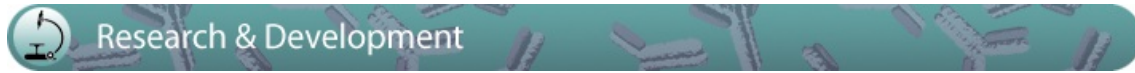


Identification and characterisation of the immune response properties of *Lampetra japonica* BLNK

By *abchain*

Created 2016-05-02 10:21



Identification and characterisation of the immune response properties of *Lampetra japonica* BLNK ^[1]

Mon, 05/02/2016 - 10:21 | abchain

[Previous page](#)

[2]

B cell linker protein (BLNK) is a central linker protein involved in B cell signal transduction in jawed vertebrates. In a previous study, we have reported the identification of a BLNK homolog named Lj-BLNK in lampreys. In this study, a 336bp cDNA fragment encoding the Lj-BLNK Src homology 2 (SH2) domain was cloned into the vector pET-28a(+) and overexpressed in *Escherichia coli* BL21. The recombinant fragment of Lj-BLNK (rLj-BLNK) was purified by His-Bind affinity chromatography, and polyclonal antibodies against rLj-BLNK were raised in male New Zealand rabbits. Fluorescence activated cell sorting (FACS) analysis revealed that Lj-BLNK was expressed in approximately 48% of the lymphocyte-like cells of control lampreys, and a significant increase in Lj-BLNK expression was observed in lampreys stimulated with lipopolysaccharide (LPS). Western blotting analysis showed that variable lymphocyte receptor B (VLRB) and Lj-BLNK were distributed in the same immune-relevant tissues, and the levels of both were upregulated in supraneural myeloid bodies and lymphocyte-like cells after LPS stimulation. Immunofluorescence demonstrated that Lj-BLNK was localized in VLRB+ lymphocyte-like cells. These results indicate that the Lj-BLNK protein identified in lampreys might play an important role in the VLRB-mediated adaptive immune response.

To read more click [here](#) ^[3]

Mon, 05/02/2016 - 10:21 | abchain

[Previous page](#)

[2]

Source	Rate this article
--------	-------------------

Nature.com

Related Company/Institution:

[4]

Nature Publishing Group

[Nature Scientific Report](#) ^[3]

Source URL:

http://www.antibodychain.com/antibody_research_development_news/identification_and_characterisation_immune_response_properties_la

Links:

[1] http://www.antibodychain.com/antibody_research_development_news/identification_and_characterisation_immune_response_properties_la

[2] [http://www.antibodychain.com/javascripthistory.go\(-1\)](http://www.antibodychain.com/javascripthistory.go(-1))

[3] <http://www.antibodychain.com/node/add/research-development-news>

[4] <http://www.antibodychain.com/node>