

Invertebrate Antibody: Our Own Opinion

Michel Leclerc

Immunology of Invertebrates, 556 rue Isabelle Romée, 45640 SANDILLON (FRANCE)

***Corresponding Author:** Michel Leclerc, *Immunology of Invertebrates, 556 rue Isabelle Romée, 45640 SANDILLON (FRANCE).*

ABSTRACT

How to believe in the works of Bang, Loker et al who have never observed invertebrate lymphoid cells. These works must be completed today by recent observations and genomic studies.

It is Obvious to Recall the Following Main Points:

F.Bang in 1962 said:

« While most of the scattered attempts to produce antibodies in antibodies have failed » (Ref. 1)

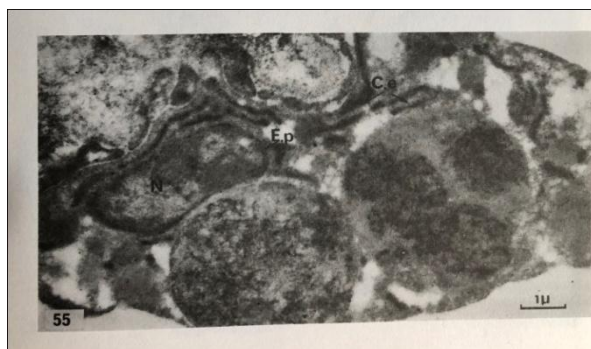
Some years later, E.S Loker (Ref.2) with 509 citations in 509 articles, cited:

« The approximate 30 extant invertebrate phyla have diversified along separate...

NK cells, antibodies and cytotoxic T cells are lacking in invertebrates »

We are surprised, these authors have never observed Invertebrate lymphocytes to have such opinion!

We have observed sea star lymphocytes in 1974 (Ref.3) so invertebrate ones. At the same time we have injected Horse-radish peroxydase (HRP) as antigen and obtained, for the first time, an antibody-like precipitate which was specific, and complement-dependent: the anti-HRP (Fig.1)



Furthermore, spontaneous and induced cytotoxicity, NK cells were shown in sea star immune system according the works of Luquet and Leclerc.

In 2010-2019 genomic studies assert the evidence of IPA (Invertebrate Primitive Antibody)

(Ref 4 and 5): it seems fundamental to recall that data.

REFERENCES

- [1] Bang, F.B (1962) Nature , 196 88-89
- [2] Loker, E.S et al (2004) Immunol. Rev, 198 10-24
- [3] Leclerc, M.(1974) Thèse de Doctorat ès Sciences, Orleans University
- [4] Vincent, N.et al (2014) Meta Gene 03 005
- [5] Leclerc, M (2018) Int. J. Vaccines Vaccin 5(1) 00095

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