

# The lucidum layer in rumen mucosa of ruminants and epidermis of humans and animals.

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Through histochemical and histoenzimatic methods I was able to show an enzymatic molecular layer between the last layer of live cells (granular layer) and the cornos layer within the rumen and the animal and human skin.

This extra cellular molecular layer , secreted by the cells belonging to the granular layer is composed by several energetic enzymes (alkaline phosphates and acid phosphatase , determined through the Gomori method) , ATP. Through the Wachstein and Meisel method , cytochrome oxidase through the G-Nady method and thiolic (SH) groups by Chevremont and Frederic reaction.

The layer in question has the role of protecting the ruminal and skin epithelium from the substances that may get in from the outside , to decompose those substances into their components , to select and transport them to the internal environment through an active biological process , even against osmotic gradient. I named this layer „Bariera epiplasmala” (Epiplasmal barrier) , which is essentially a biochemical buffer and a selective filter where complex molecular reactions take place by spending energy (ATP , phosphatase) under the nucleic acids genetically impulse and control.

**Keywords** : epiplasmal barrier in the rumen and skin