

# Inhibition of in vitro reconstitution of rotavirus transcriptionally active particles by anti-VP6 monoclonal antibodies

Kohli, Evelyne

Pothier, P.

Tosser, Gwenola

Cohen, J.

Sandino, Ana Maria

Spencer, E.

Six monoclonal antibodies specific for the major capsid protein of rotavirus, VP6, previously characterized, were tested in a biological assay for their capacity to block the transcriptase activity associated with the single-shelled particles. The results showed that two MAbs (RV-50 and RV-133), specific for distinct antigenic sites, were able to block the transcription when they were incubated with a purified baculovirus-expressed group A VP6, prior to the reconstitution of the single-shelled particles from the cores, suggesting that at least two domains are involved in active single-shelled particle reconstitution. The results obtained previously from immunochemistry of synthetic peptides did not allow us to attribute this biological activity to a particular linear sequence of the protein, the domain involved being probably complex and dependent on the folding of the protein. However, the C-terminal end, which is necessary for binding into single-shelled particles could be necessary