

## Development of genetically recombinant rabies vaccine

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Pakistan is among those few countries where Rabies is endemic and great fear for human as well as livestock population. Countless animals which are exposed to rabies died either due to non availability of potent rabies vaccine or use of sheep brain originated Semple vaccine. Farmers cannot afford to buy expensive tissue culture vaccine. Here we describe a genetic recombinant rabies virus cell culture vaccine. The backbone of the virus is rabies virus ERA, with the glycoprotein (G) substituted with a Pakistan rabies virus G. The resultant genetically recombined virus was recovered by reverse genetic system. Hundred percent and eighty percent mice survived vaccinated through intramuscular route and per oral route respectively when they were exposed to the challenge rabies virus while eighty percent unvaccinated mice died when they were exposed to rabies virus challenge. On the basis of our results, we suggest our vaccine a good candidate for Rabies vaccination in Pakistan after trials in large animals. It will not only save precious lives, livestock population but also save a huge amount of foreign exchange and provide cell culture vaccine virus to farmer at very cheap rates.

### Biography

Muhammad Saleem Haider has completed his Ph.D at the age of 31 years from University of London, Imperial College of Science, Technology and Medicine, UK and postdoctoral studies from University of Toronto, Canada. He is the Director of Institute of Agricultural Sciences, University of the Punjab, Lahore, Pakistan. He has published more than 50 papers in reputed journals and serving as an Editor In-Chief for Mycopath, and editorial and reviewer member for many journals of International repute. He is also member for a no. of professional organizations and office bearer as Vice President (Punjab) for Pakistan Phytopathological Society.