What does a rabies virus titer mean?

A rabies antibody titer is essentially an estimation of an immune response against rabies virus (either through exposure or vaccination). The RFFIT is one method which provides a laboratory measurement of the ability of an individual human or animal serum sample to neutralize rabies virus.

There is no "protective" titer against rabies virus. In animal studies, survival against rabies virus infection is often more likely to occur the higher an animal's titer at time of infection, but not a definite indicator of survival. For example in one study of orally vaccinated raccoons 39% of animals with no detectable titer at infection (<0.05 IU/mL) survived, compared to 90% of animals with a titer between 0.05-0.49 and 100% of animals with a titer >0.5 IU/mL. Mounting a rapid antibody response (referred to as an anamnestic response) is often a better indicator of surviving exposure which is one reason additional doses of vaccine are recommended after an exposure, to ensure a rapid antibody response, even if a person has been previously vaccinated.