## PRODUCTION OF AN IN-HOUSE RABBIT ANTI-CAMEL IMMUNOGLOBULIN G (IgG) CONJUGATED WITH HORSERADISH PEROXIDASE (HRP) FOR USE IN IMMUNOBLOTS

Sabry M. El-Bahr<sup>1,2</sup> and E.M. El Hassan<sup>3</sup>

Department of Biomedical Sciences<sup>1</sup>, Microbiology<sup>3</sup>, College of Veterinary Medicine, King Faisal University, Al-Ahsa, 31982, P.O. Box: 400, Saudi Arabia Department of Biochemistry<sup>2</sup>, Faculty of Veterinary Medicine, Alexandria University, Alexandria, Egypt

## ABSTRACT

The present study was aimed to develop anti-camel immunoglobulin G (IgG) conjugate. Camel serum was obtained from healthy camels and the IgG was extracted from this serum using the commercially available IgG purification kits. The electrophoretic profile of camel IgG showed four bands of molecular weight 66, 50, 44 and 33 kDa. Two rabbits were immunised with the purified camel IgG for production of rabbit anti-camel IgG. IgG fraction from serum collected from the immunised rabbits at the end of the immunisation protocol was purified using the commercially available IgG purification kits. The purified IgG tested for reactivity using ELISA against camel serum and then coupled to horseradish peroxidase. The produced conjugate then tested for reactivity using western immunoblotting against serum from camels infected with *Haemonchus longistipes* and normal camel serum. The conjugate was able to react with camel serum and was able to detect three components of *H. longistipes* of molecular weight 126, 76 and 18 kDa.

Key words: Conjugation, dromedary camels, H. longistipes, HRP, IgG, immunoblots