

## P-133 Differentiation of Frozen-Thawed Beef from Chilled Beef by Ci-ELISA

Juwoon Lee<sup>\*</sup>, Jongheum Park, Cheonjei Kim and Heuynkil Shin<sup>1</sup>

Dept. of Animal Product Processing, Konkuk Univ.

<sup>1</sup>School of Biocience and Food Technology, Handong Univ.

### ABSTRACT

The illegal distributions of thawed beef as chilled beef have made uncountable of useless. And, Sails of thawed beef as korean chilled Hanwoo meat have occurred many problems. Therefore, using bovine myosin molecule as target protein, polyclonal anti for myosin whole molecules (MWM), heavy meromyosin S-1 (myosin hear part, S-1) and meromyosin (LMM) as antigens (Ags), we studied an immunological method for differen by competitive indirect ELISA (Ci-ELISA) formatted in our previous study. During storage at 4℃, the changes of imunoreactivity (IR) were not observed at the beef s day, when reacted by all Abs, anti-MWM IgG, anti S-1 IgG, and anti-LMM IgG. However, m of all thawed treatments lost IRs from 2 times thaw and IRs appeared loss of 50% abo times thawed treatments stored at -10℃ and -20℃ in the reactions with anti-M anti-LMM IgG. Width of decrease of IR appeared -10>-20>-80>-50℃, respectively. The of results from anti-MWM IgG was similar to that from anti-LMM IgG. However, we fail obtained differentiation of thawed beef from chilled by anti S-1 IgG, because of uncle

**Key words :** Thawed beef, differentiation, and Ci-ELISA