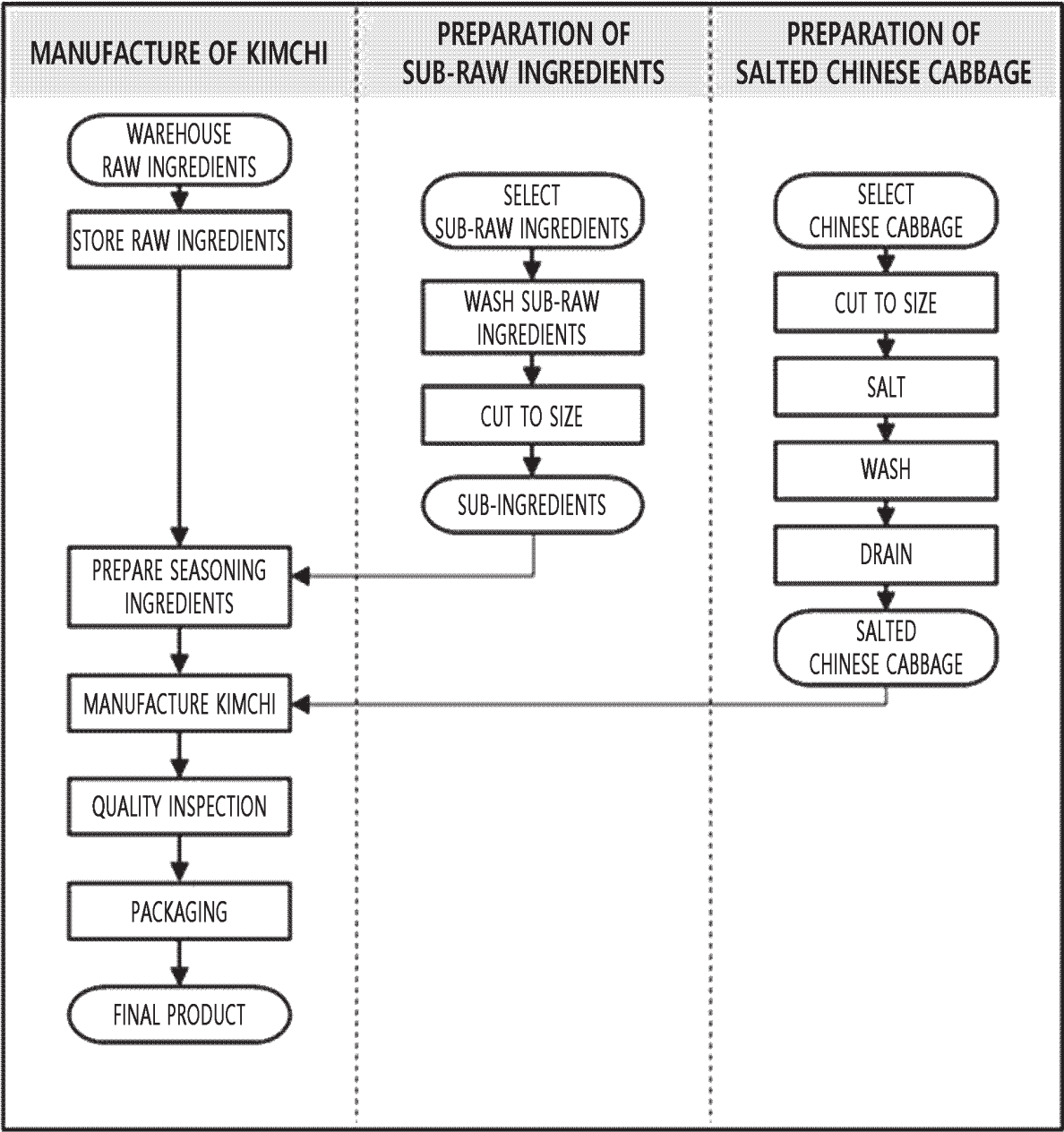


[FIG. 1]



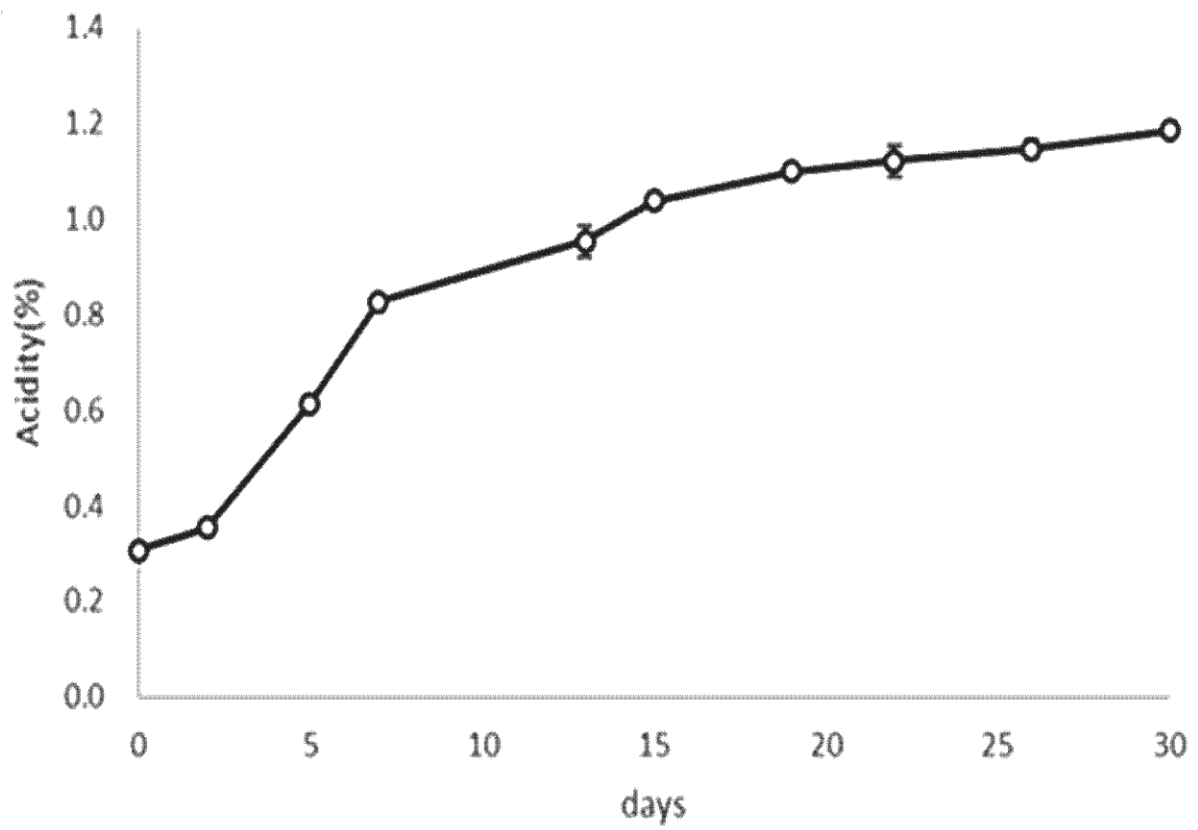
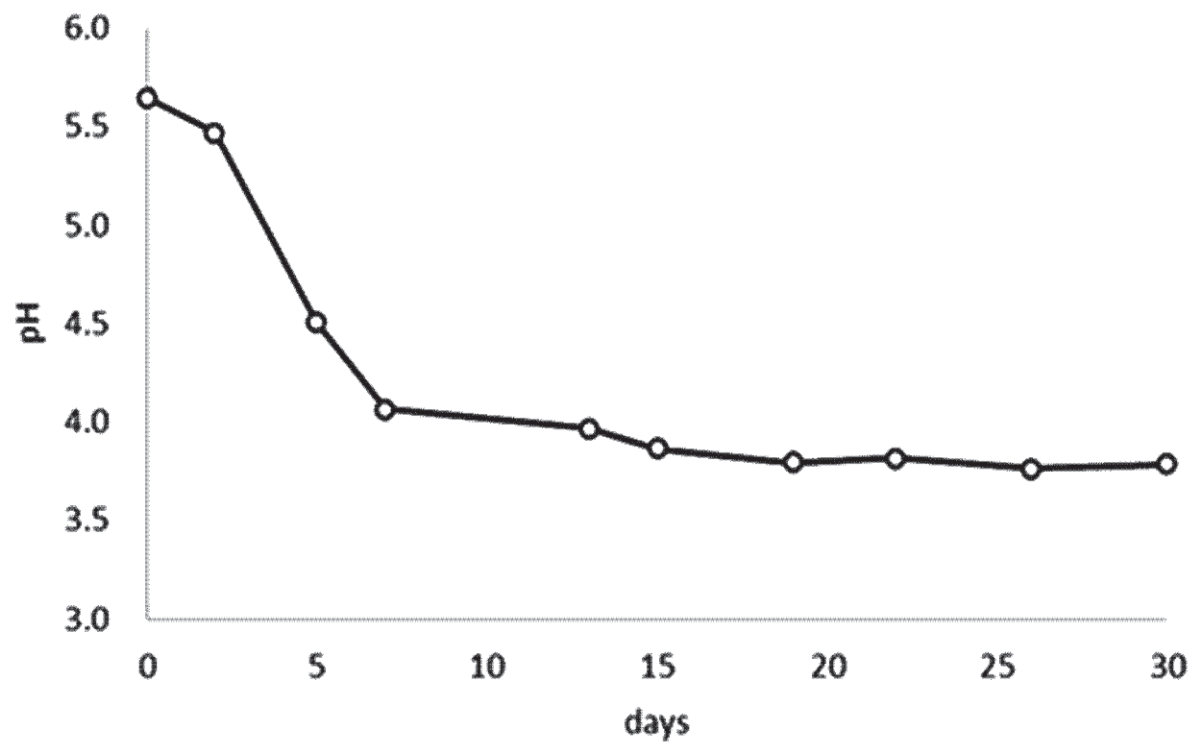
[FIG. 2A]

PROCESS NO.	PROCESS NAME	OPERATING CONTENT AND METHOD	PROCESS CONDITION	MAJOR APPLIANCE	INSPECTION METHOD	PERIOD	WHAT TO DO FOLLOWING INSPECTION FAILURE
1	WAREHOUSE RAW INGREDIENTS	1. CHECK WHETHER CHINESE CABBAGE AND SUB-RAW INGREDIENTS ARE WAREHOUSED ACCORDING TO STORAGE STANDARD. 2. INSPECT IN COMPLIANCE WITH STANDARD FOR INSPECTION. 3. RECORD INSPECTION RESULTS.	TEMPERATURE OF WORKING AREA : 25°C OR LESS	SCALE , RULER , KNIFE , SUGAR METER	VISUAL INSPECTION	UPON RECEIPT	RETURN
2	STORE RAW INGREDIENTS	1. WAREHOUSE/STORE CHINESE CABBAGE AND SUB-RAW INGREDIENTS BY LOT IN COMPLIANCE WITH STORAGE STANDARD OF EACH RAW INGREDIENT. ※ RAW INGREDIENT TO BE STORED IN REFRIGERATOR (0~10°C) : CHINESE CABBAGE, RADISH, GALIC, LEAF MUSTARD, CHIVES, LARGE GREEN ONION, GINGER, AND LACTIA ACID BACTERIA CULTURE FLUID ※ RAW INGREDIENT TO BE STORED AT ROOM TEMPERATURE (1~35°C) : RED PEPPER POWDER, XANTHAN GUM (POWDER), ANCHOVY SAUCE, SOLAR SALT, CRYSTALLINE FRUCTOSE, SHRIMP SAUCE, AND KELP EXTRACT HOWEVER, RAW INGREDIENT TO BE STORED AT ROOM TEMPERATURE (1~35°C) MAYBE STORED IN REFRIGERATOR	TEMPERATURE OF COLD - STORAGE WAREHOUSE : 5°C OR LESS	COLD - STORAGE WAREHOUSE	TEMPERATURE CONTROL	ON DEMAND	CORRECT TEMPERATURE
3	CUT CHINESE CABBAGE	CUT CHINESE CABBAGE IN HALF USING CUTTER.	TEMPERATURE OF WORKING AREA : 25°C OR LESS	CUTTER	VISUAL INSPECTION	WHEN WORKING	REWORK
4	SALT CHINESE CABBAGE	1. PREPARE BRINE. ※ BRINE: 8~10% TEMPERATURE OF BRINE: 7~20°C ADJUST BRINE BNX ACCORDING TO SEASONAL CHINESE CABBAGE QUALITY (TEMPERATURE, CONCENTRATION) 2. PILE CHINESE CABBAGE CUT IN HALF IN SALTING TANK WITH CUT SIDES FACING UPWARD TO BE SUFFICIENTLY SOAKED WITH BRINE. 3. PRESS CHINESE CABBAGE BY WEIGHT OF 10% OR MORE OF WEIGHT OF CHINESE CABBAGE. (ADJUSTABLE ACCORDING TO CABBAGE SIZE) 4. SALT FOR MORE THAN 15 HOURS. (ADJUSTABLE ACCORDING TO SEASONAL CHINESE CABBAGE QUALITY)	TEMPERATURE OF WORKING AREA : 25°C OR LESS	BRINE MAKER SALTING TANK	SALINITY CHECK TEMPERATURE CHECK	WHEN WORKING	REWORK
5	WASH/SELECT SALTED CHINESE CABBAGE AND DRAIN	1. UPON COMPLETION OF SALTING, PICK UP CABBAGE AND WASH CABBAGE AUTOMATICALLY AND MANUALLY UNDER RUNNING WATER. WHEN WATER OF WATER TUB IS NOT CLEAN BY VISUAL INSPECTION, INCREASE AMOUNT OF WATER AND DECREASE AMOUNT OF CABBAGE. CAREFULLY WORK TO COMPLETELY REMOVE FOREIGN MATTER DURING WASHING PROCESS. 2. NATURALLY DRAIN WASHED CABBAGE IN STAINLESS STEEL CONTAINER. (IN PARTICULAR, COVER SURFACE WITH PLASTIC TO PREVENT FROM DRYING.) 3. AFTER 3 HOURS OF DRAINING, MEASURE SALINITY OF SALTED CABBAGE. (SALINITY OF SALTED CABBAGE: 1.5~1.9%)	TEMPERATURE OF WORKING AREA : 25°C OR LESS TEMPERATURE OF COLD- STORAGE WAREHOUSE : 5°C OR LESS (HOWEVER, MAINTAIN TEMPERATURE BELOW 10°C WHEN OPENING AND CLOSING HEAT DISSIPATION DOOR	WASHING TUB DRAINING CONTAINER LOW-TEMPERATURE WAREHOUSE	SALINITY CHECK	WHEN WORKING	REWORK
6	CUT/SELECT SUB-RAW INGREDIENTS	1. REMOVE 100% OF INEDIBLE PART AND ROOT. - RADISH, GINGER, LEAF MUSTARD, LARGE GREEN ONION, CHIVES : SELECT AND REMOVE ROTTEN OR BRUISED PART - GALIC : SELECT AND REMOVE BROWN-COLORED, ROTTEN, OR BRUISED PART	TEMPERATURE OF WORKING AREA : 25°C OR LESS	KNIFE , CUTTING BOARD , WORKBENCH	VISUAL INSPECTION	WHEN WORKING	REWORK
7	WASH SUB - INGREDIENTS	1. REMOVE 100% OF FOREIGN MATTER BY WASHING SELECTED INGREDIENTS IN TWO STAGES. 2. AFTER FILLING WASHED INGREDIENT IN WASHED P-BOX NOT TO OVERFLOW, MOVE BOX TO COLD-STORAGE WAREHOUSE AND DRAIN AND STORE/USE.	TEMPERATURE OF WORKING AREA : 25°C OR LESS TEMPERATURE OF COLD-STORAGE WAREHOUSE : 5°C OR LESS	COLD-STORAGE WAREHOUSE	VISUAL INSPECTION	WHEN WORKING	REWORK

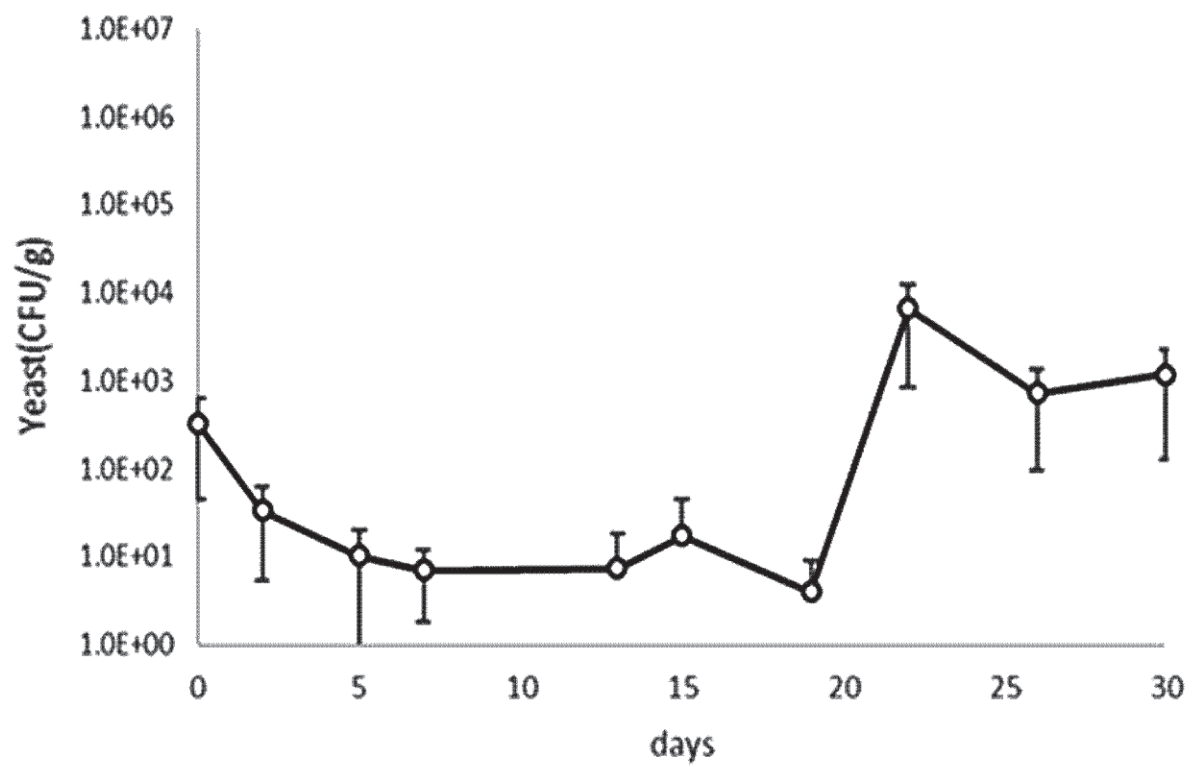
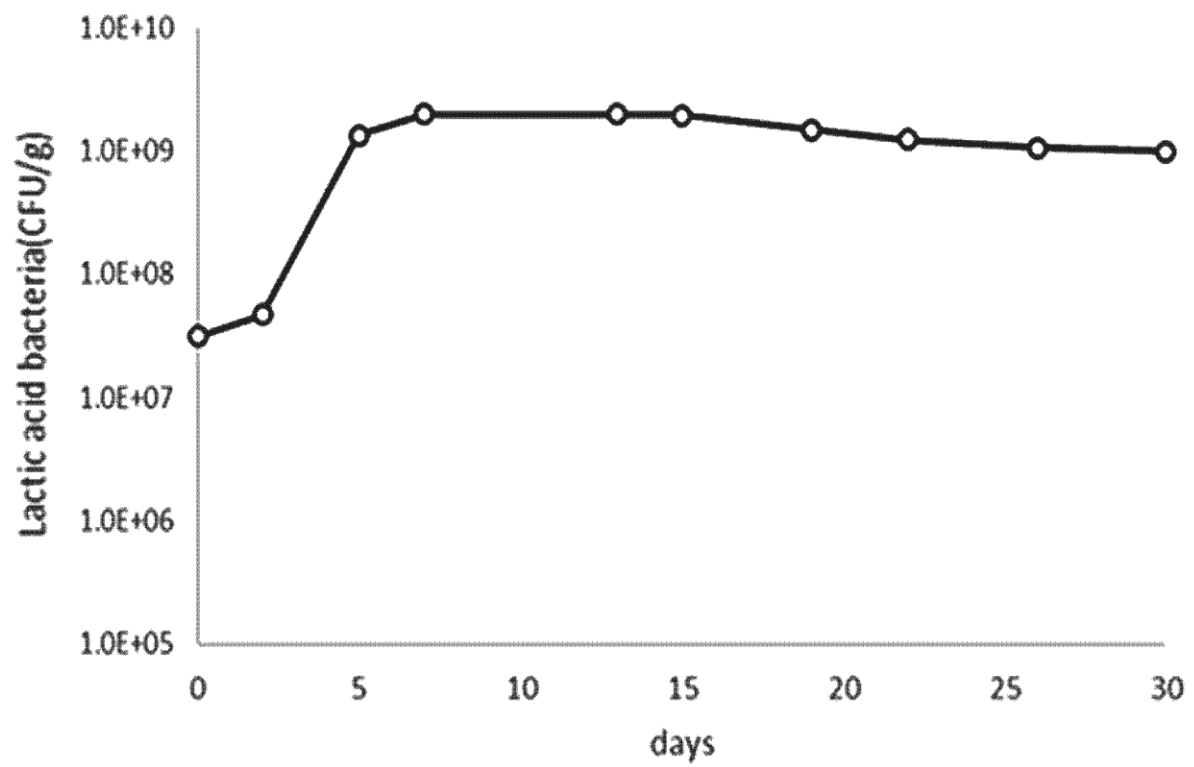
[FIG. 2B]

8	CUT SUB-INGREDIENTS	1. RADISH : CUT WASHED/SELECTED RADISH TO 2 CM IN WIDTH AND 5 MM IN LENGTH USING RADISH CUTTER AND DISCARD ROTTEN PART 2. GALIC : PRIMARILY GRIND USING SILENCE CUTTER AND SECONDARILY CHOP TO MAKE END INVISIBLE. 3. GINGER : PRIMARILY GRIND USING SILENCE CUTTER AND SECONDARILY CHOP 4. LEAF MUSTARD AND CHIVES : CUT USING DICER (CUT SIZE: 3~4 CM) 5. LARGE GREEN ONION : CUT USING DICER (CUT SIZE: 3~5 MM) * USE UP CUT SUB-INGREDIENTS WITHIN 24 HOURS WHEN STORED IN COLD-STORAGE WAREHOUSE. (USE UP WITHIN 72 HOURS ONLY ON HOLIDAYS. HOWEVER, DISCARD PREPARED SUB-INGREDIENTS AND PREPARE NEW ONES IN THE CASE OF QUALITY DETERIORATION.)	TEMPERATURE OF WORKING AREA : 25°C OR LESS TEMPERATURE OF COLD-STORAGE WAREHOUSE : 5°C OR LESS	SILENCE CUTTER, CHOPPER, DICER, RADISH SHREDDER	VISUAL INSPECTION	WHEN WORKING	REWORK
9	MEASURE (MIX SEASONING INGREDIENTS)	1. MEASURE AND MIX PREPARED SUB-INGREDIENTS IN MIXING RATIO. 2. AFTER MIXING, COVER MIXTURE TO PREVENT FOREIGN MATTER FROM BEING MIXED THEREWITH AND AGE MIXTURE FOR 3 HOURS OR MORE.	TEMPERATURE OF WORKING AREA : 25°C OR LESS TEMPERATURE OF COLD-STORAGE WAREHOUSE : 5°C OR LESS	SCALE SEASONING AGITATOR	VISUAL INSPECTION	WHEN WORKING	REWORK
10	MIX	MIX MEASURED SEASONING INGREDIENTS, RADDISH, AND SALTED CABBAGE.	TEMPERATURE OF WORKING AREA : 25°C OR LESS	WORKBENCH	VISUAL INSPECTION	WHEN WORKING	REWORK
11	CONFIRM STANDARD AND MEASURE	JUDGE CONFORMITY OF PRODUCT BY SAMPLING AND RECORD RESULT IN DAILY WORK LOG	TEMPERATURE OF WORKING AREA : 25°C OR LESS	SALIMETER PH METER	SALINITY MEASUREMENT ACIDITY MEASUREMENT	WHEN PRODUCING	REWORK OR DISCARD
12	PACKAGING AND X-RAY	1. PACK AFTER CHECKING WEIGHT OF PRODUCT AND CLEANNESS OF POUCH. 2. CHECK DATE OF MANUFACTURE, PACKAGING CONDITION (FOREIGN MATTER IN SEALING AREA, POOR SEALING), UNDER WEIGHT, CLEANNESS, AND RELEASE QUALITY VIA TOTAL INSPECTION. 3. DISCARD OR REPACK DEFECTIVE PRODUCT. DISCARD PRODUCT INCLUDING FOREIGN MATTER SUCH AS METALLIC SUBSTANCE AND STONE FOUND USING X-RAY	TEMPERATURE OF WORKING AREA : 25°C OR LESS	X-RAY	PASS THROUGH X-RAY VISUAL INSTPECTION	ALL PRODUCTS	REWORK OR DISCARD
13	RELEASE	1. RELEASE PRODUCTS FIRST-IN-FIRST-OUT BASED ON DATA OF MANUFACTURE AND ACIDITY. 2. AFTER CHECKING PACKAGING STATE, DATE OF MANUFACTURE, CLEANNESS, WEIGHT, AND RELEASE QUALITY OF PRODUCT TO BE RELEASED, RELEASE THE PRODUCT. SALINITY OF PRODUCT : 1.6~2.0% TEMPERATURE OF PRODUCT : 5°C OR LESS RELEASE ACIDITY : 0.4% OR LESS	TEMPERATURE OF WORKING AREA : 25°C OR LESS TEMPERATURE OF COLD-STORAGE WAREHOUSE : 5°C OR LESS	STAMP	SALINITY MEASURE MENT ACIDITY MEASUREMENT TEMPERTURE MEASUREMENT VISUAL INSPECTION	WHEN RELEASING	REWORK OR DISCARD

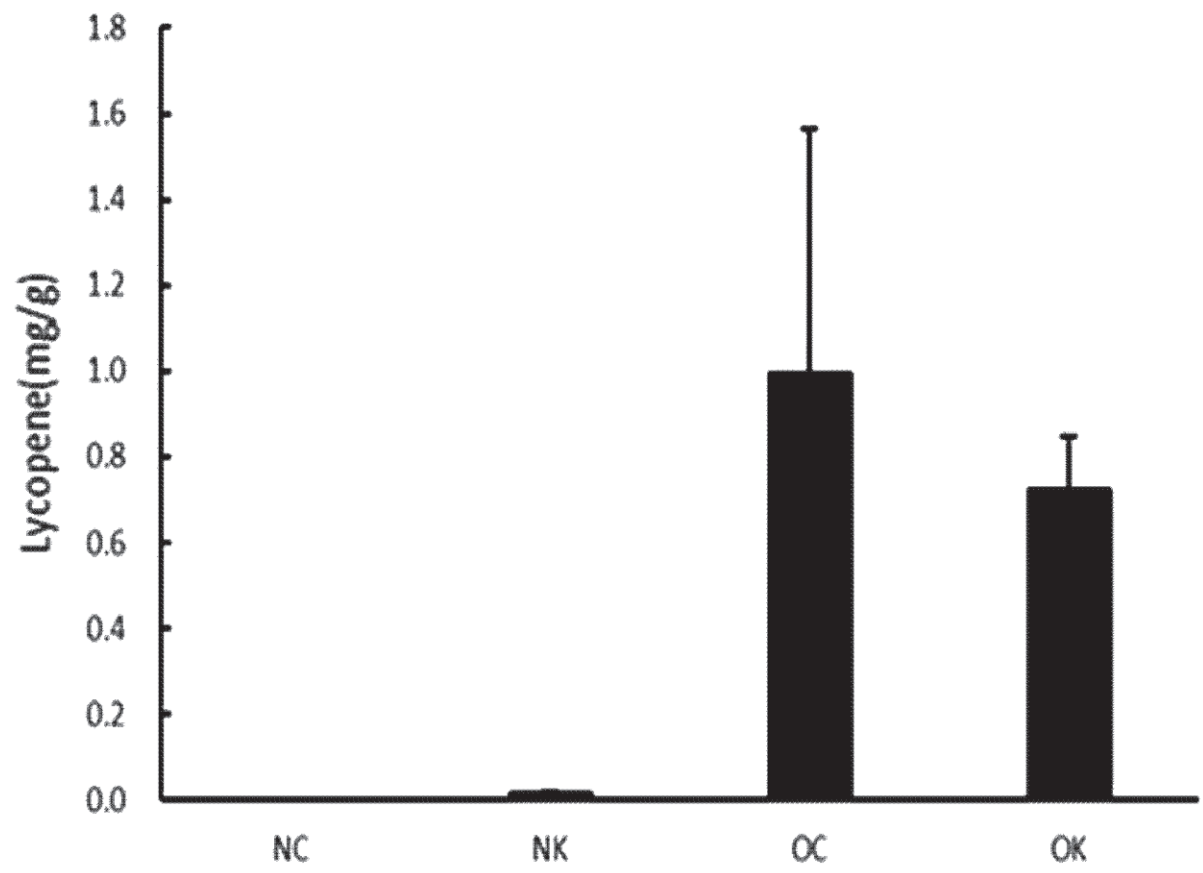
[FIG. 3]



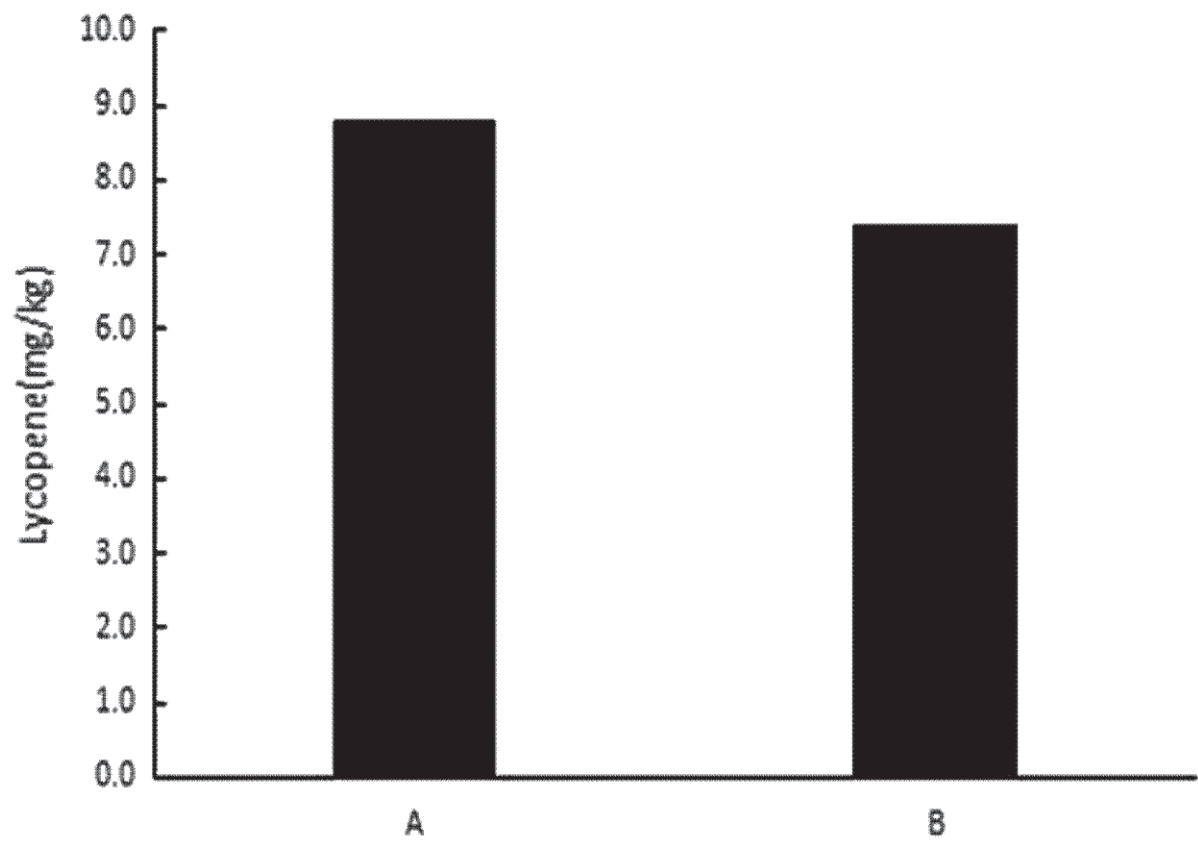
[FIG. 4]



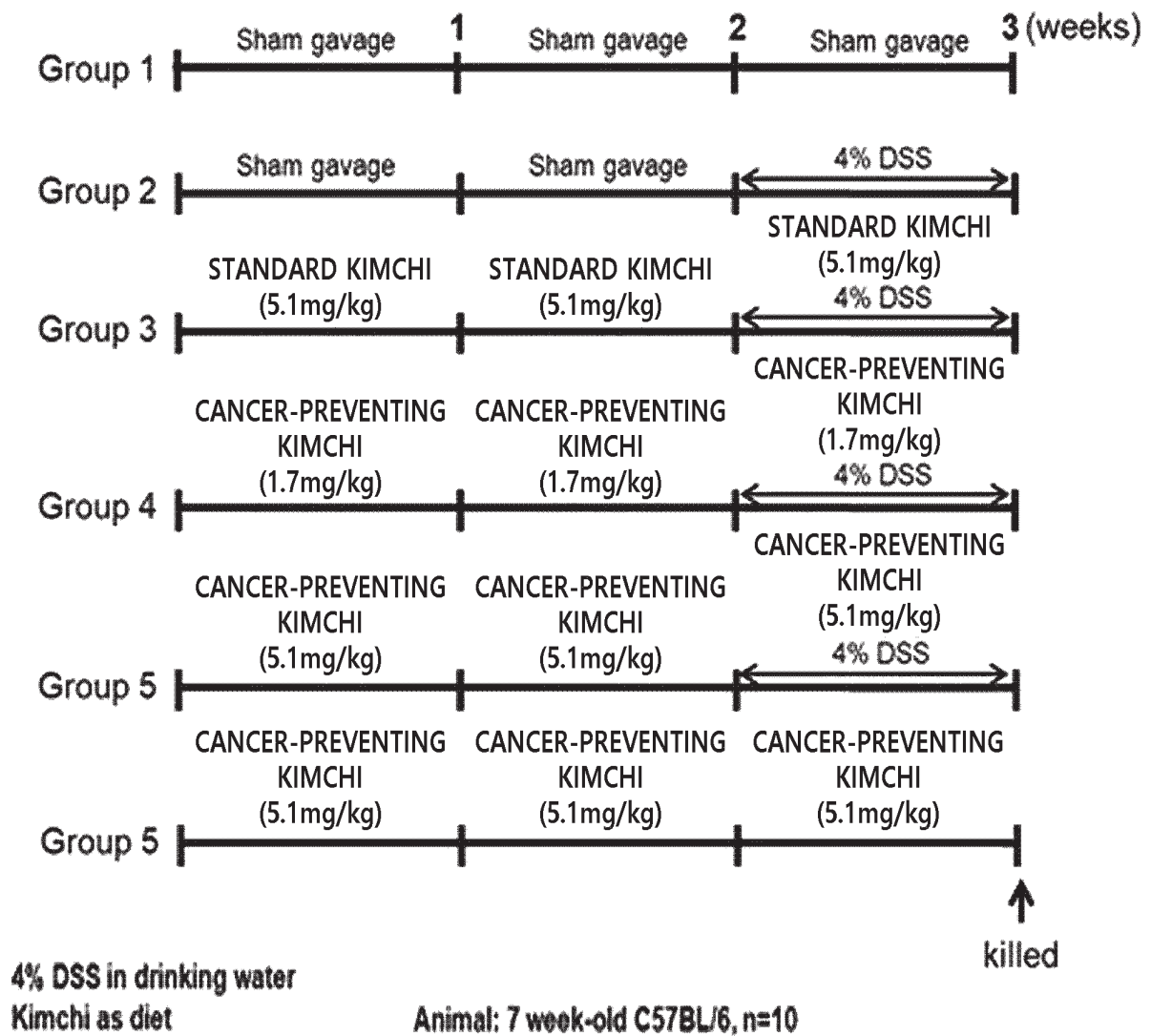
[FIG. 5]



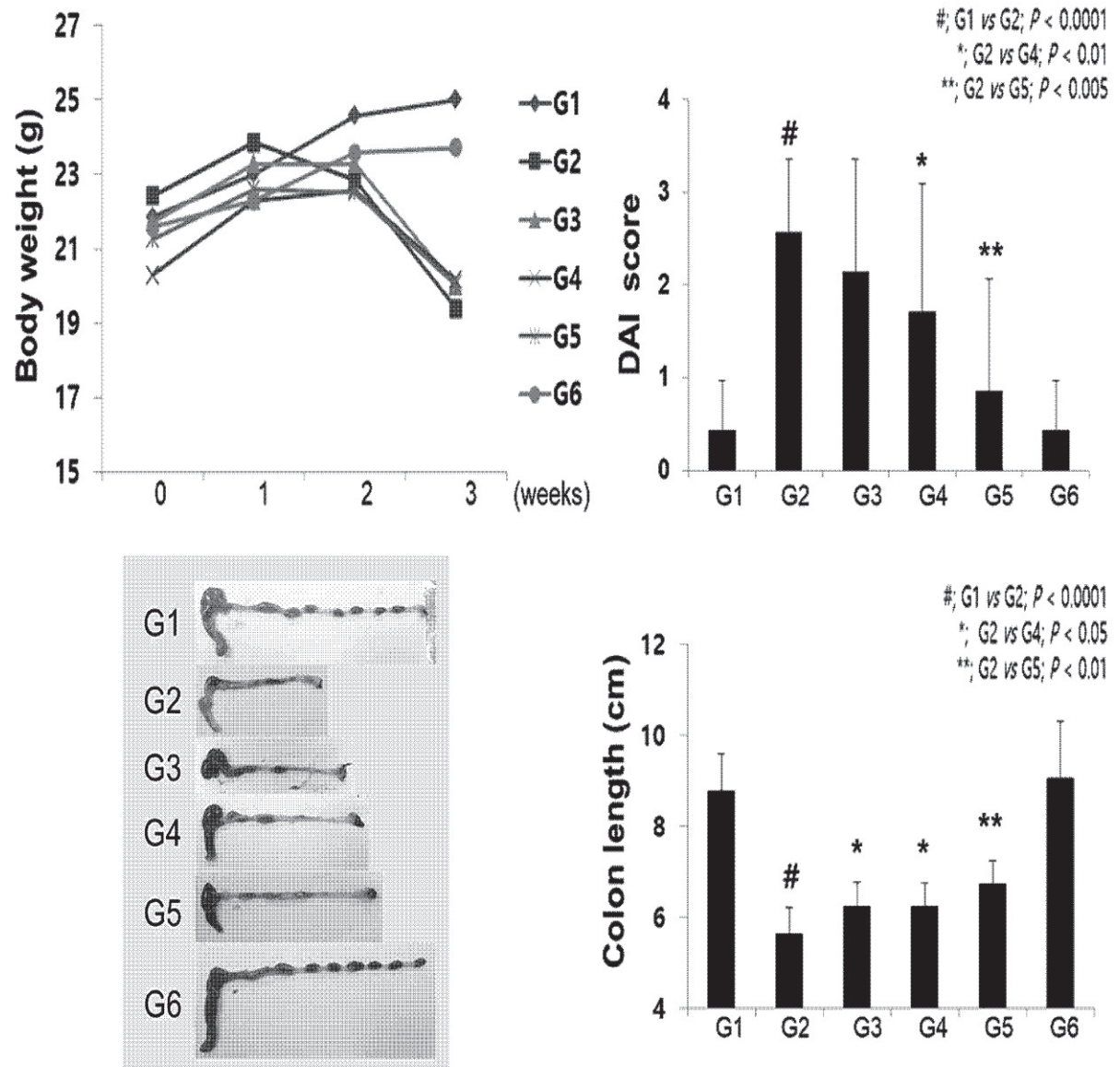
[FIG. 6]



[FIG. 7]

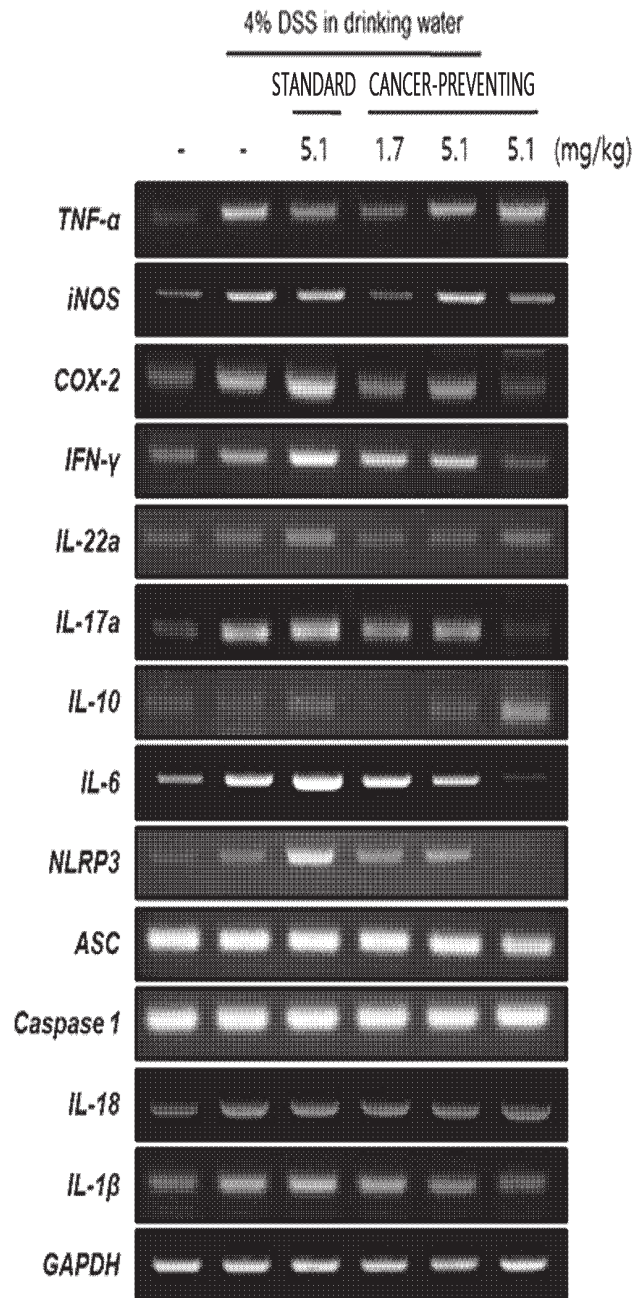


[FIG. 8]

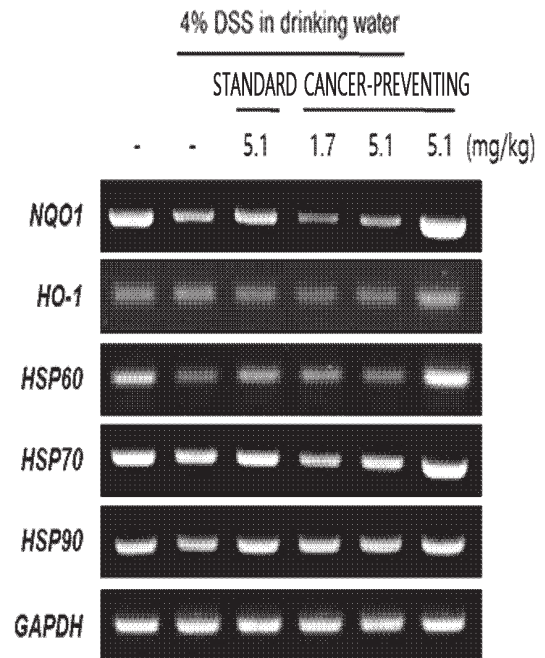


[FIG. 9]

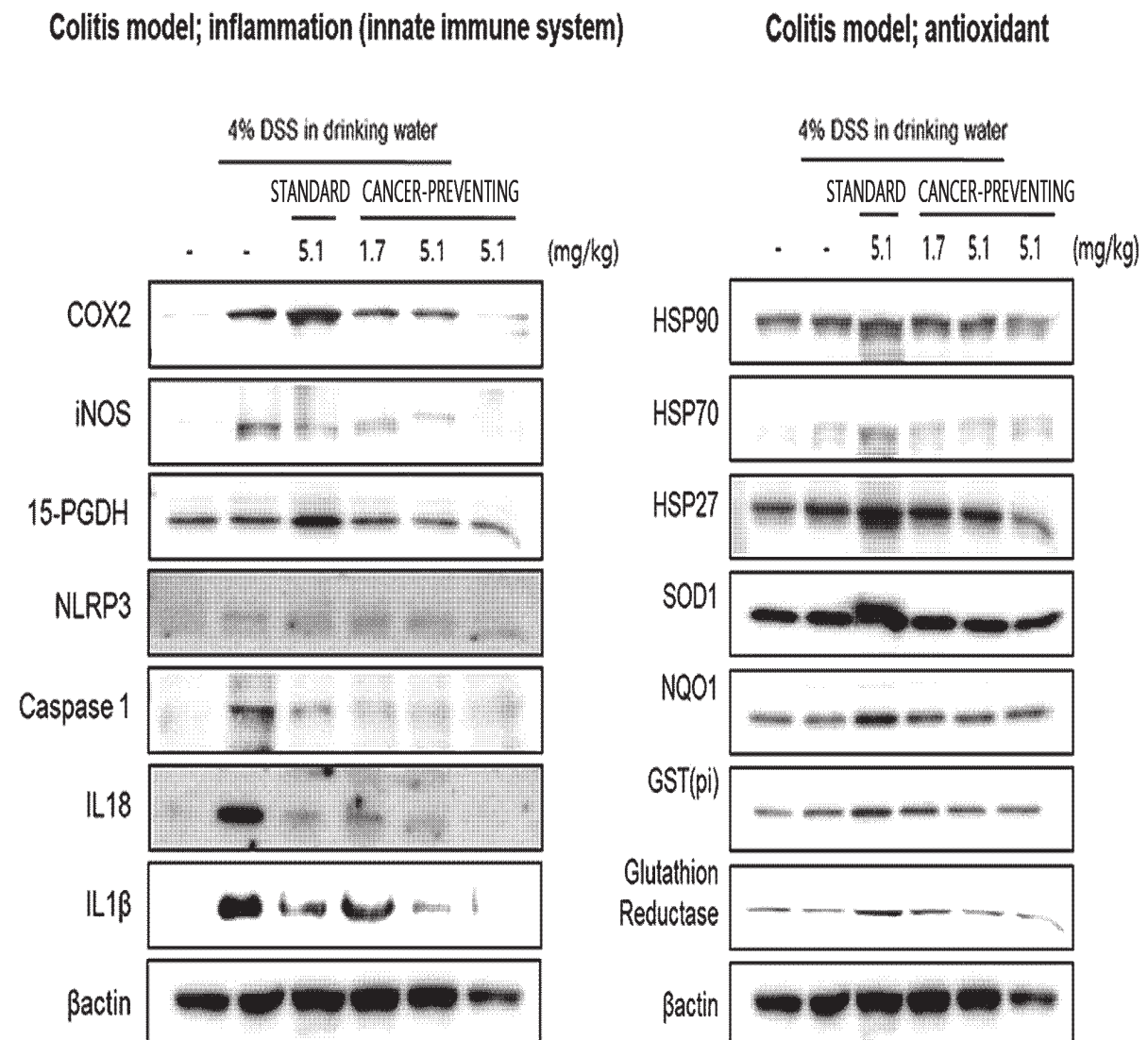
Colitis model; anti-inflammatory cytokines



Colitis model; anti-oxidant

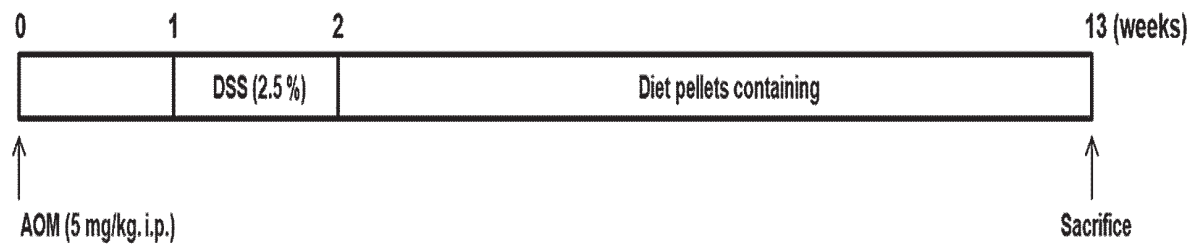


[FIG. 10]



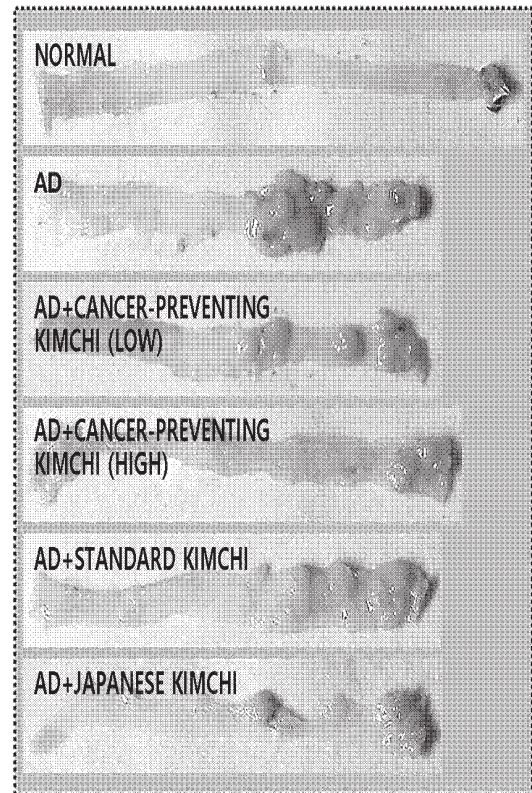
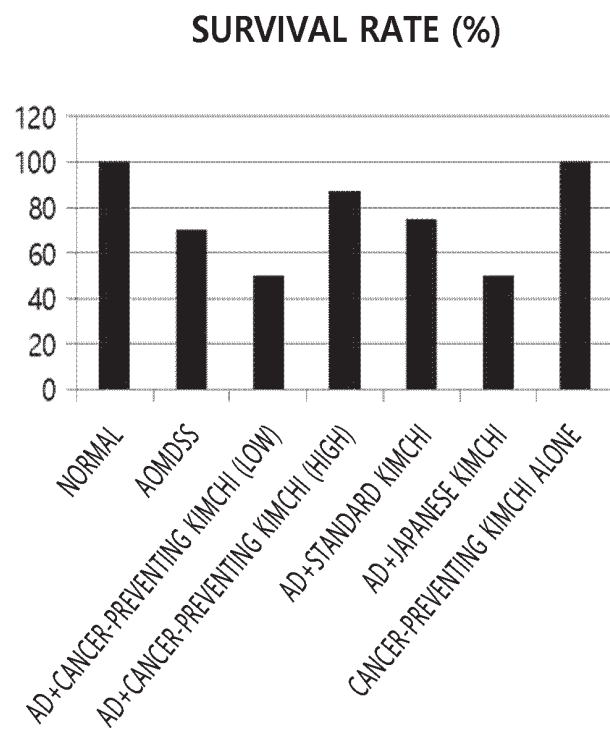
[FIG. 11]

**CONFIRM PREVENTIVE EFFECT OF CANCER-PREVENTING KIMCHI ON COLORECTAL CANCER
USING LONG-TERM TWO-STAGE COLORECTAL CANCER ANIMAL MODEL**



Group		KIMCHI (g/kg)	N
1	Control	-	7
2	AOM.DSS	0	7
3	AOM.DSS + CANCER-PREVENTING KIMCHI (LOW CONCENTRATION)	1,7	7
4	AOM.DSS + CANCER-PREVENTING KIMCHI (HIGH CONCENTRATION)	5.0	7
5	AOM.DSS + STANDARD KIMCHI	5.0	7
6	AOM.DSS + JAPANESE KIMCHI	5.0	7
7	CANCER-PREVENTING KIMCHI	5.0	7
			Total=49

[FIG. 12]



[FIG. 13]

