Ringbio



Monitoring Microbiology Contamination in Milk & Dairy Products

Microbiology is important to food safety, production, processing, preservation, and storage. Microbes such as bacteria, molds, and yeasts are employed for the foods production and food ingredients such as production of wine, beer, bakery, and dairy products. It has been an import issue for global food safety for quite a long time. Almost in every country, strict regulations for food microbial contamination have been established.

Take EU as an example, in Commission Regulation (EC) No 2073/2005, microbiological criteria for foodstuff have been established and renewed. The latest amendment is EC 2015/2285. In Chapter 2.2, Annex 1 of EC 2073/2005, specific criteria for milk and dairy products are listed, which briefly describe as below.

Products	Bacteria	Limits	Ref method	
Liquid milk	Enterobacteriaceae	10 cfu/ml	ISO 21528-2	
Cheese made from	E. Coli	100 cfu/g, 1000 cfu/g	ISO 16649-1/2	
heat-treated source				
Cheese made from	Coagulase-positive	10 ⁴ cfu/g, 10 ⁵ cfu/g	ISO 6888-2	
raw milk	staphylococci			
Milk powder & whey	Enterobacteriaceae	10 cfu/g	ISO 21528-2	
powder				
	Coagulase-positive	10 cfu/g, 100 cfu/g	ISO 6888-1/2	
	staphylococci			
Infant formula and	Enterobacteriaceae	Absence in 10g	ISO 21528-1	
dried dietary foods	Presumptive Bacillus	50cfu/g, 500cfu/g	EN/ISO 7932	
for special medical	cereus			
for infants below 6				
months				

Generally, **enterobacteriaceae** is a must-check parameter for all samples, and the limits vary among different foods. For infant formula and related, the limit is "absence in 10g", which means it shall not be detected. If **enterobacteriaceae** is detected, **E. sakazaki** shall be tested. Unless a correlation between these micro-organisms has been established at an individual plant level.

Ringbio



QuickPlate[™] *Microbial Count Plate*

Item #	Description	Colony enumeration	Unit Size	Time used
KGR001	Aerobic Count Plate	Red colony	12tests	36±1 ℃, 48±2h
KGR002	Staph Count Plate	Dark purple red colony	12tests	36℃±1℃,24±2 h
KGR003	Pivot E. coli / Coliform Count Plate	Blue purple colony	12tests	36℃±1℃,24±2 h
KGR004	Pivot Coliform Count Plate	Green colony	12tests	36℃±1℃,24±2 h
KGR005	Listeria Count Plate	Blue green colony	12tests	36℃±1℃,24±2h
KGR010	Coliform Count Plate	Red colony	12tests	36℃±1℃,18-24 h
KGR011	E. coli / Coliform Count Plate	Blue purple & red colony	12tests	36℃±1℃,18-24 h
KGR013	Bacillus Cereus Count Plate	Purple red	12tests	36℃±1℃,24±2 h
KGR015	Salmonella Count Plate	Purple red	12tests	36℃±1℃,24±2h

Contact Us

Ring Biotechnology Co Ltd

Add: Building 3, Zhongtongtai Science Park, No. 11, Kechuang 14th St, Beijing 100176, CHINATel: +86.10.56267496Web: www.ringbio.comEmail: export@ringbio.com