

# Hygiena BAX® Q7 PCR opens export door for Wagyu beef



Wagyu beef is synonymous with high quality dining. Its taste and highly marbled tender meat have made demand for the beef very high, resulting in one of the most expensive food choices in restaurants and retail outlets. Consisting of four genetic strains of Japanese cattle (the name comes from “Wag” or “Japanese” and “yu” or “cow”), the beef product is admired worldwide.

For many years, Wagyu cattle were raised in Japan, and modern Wagyu beef arises from the crossing of native Japanese cattle (used mostly as draft animals) with imported breeds in the latter 1800s. Outside breeds were closed to inclusion in 1910.

Wagyu cattle breeding and production is tightly regulated in Japan, and beef product exports have been prohibited. Wagyu beef cattle are raised in the United States, but most production was halted in 2003 after the discovery of bovine spongiform encephalitis (BSE, or “Mad Cow disease”) and a shutdown of imported beef into Japan.



Recently, the USDA allowed imports of processed Wagyu beef into the United States, as long as testing for potential pathogens – similar tests required for other agricultural imports – were also carried out on the product. These tests are required for any meat export regulated by the United States Department of Agriculture (USDA)’s Food Safety Inspection Service (FSIS). Because of its proven reliability

and inclusion in the FSIS Microbiology Laboratory Guidebook (MLG), Hygiena BAX® Q7 Systems for real-time PCR are being used to carry out the necessary safety testing.

The USDA’s MLG is a compilation of testing

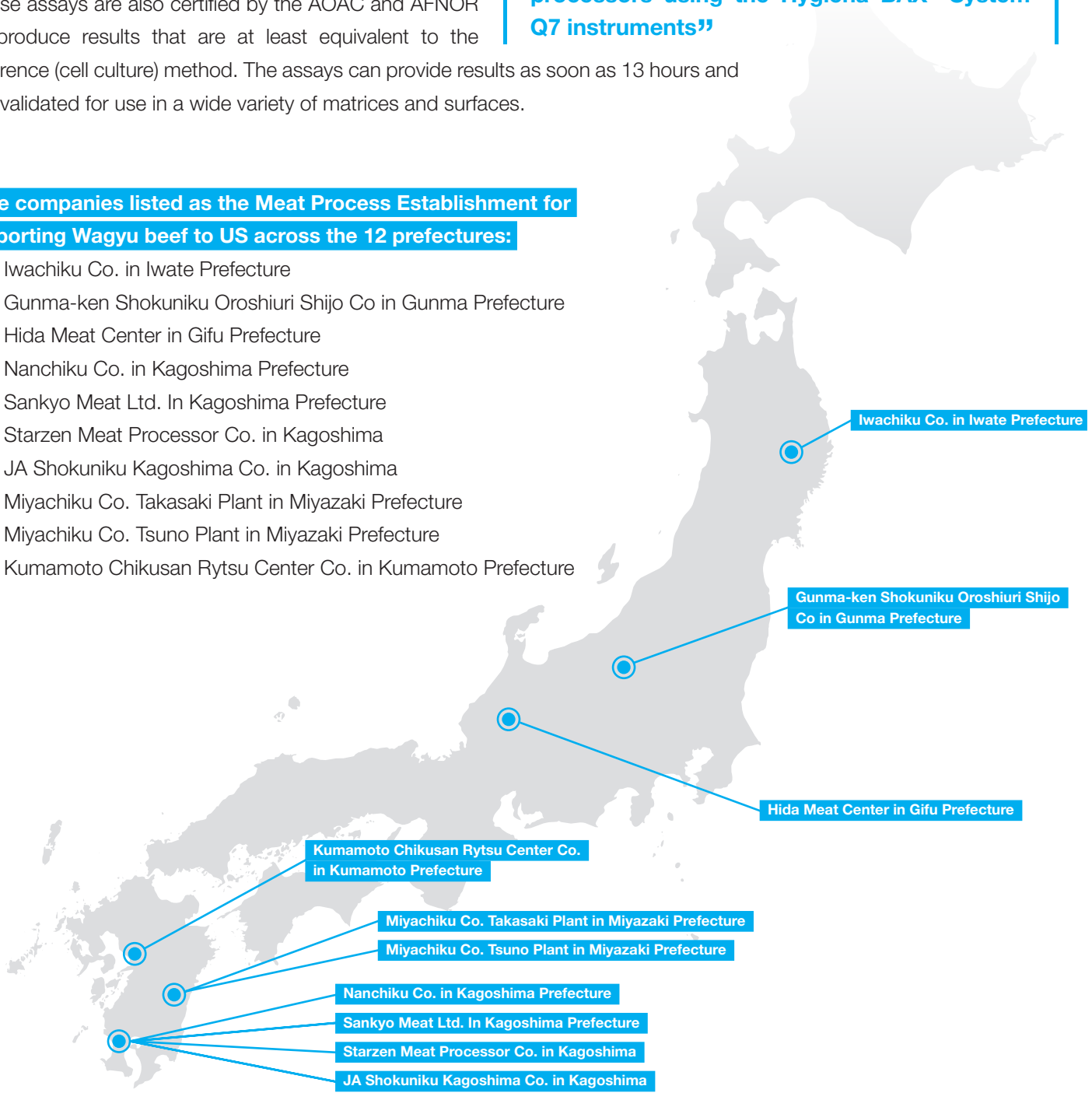
methods used by the USDA FSIS field laboratories to fulfill their regulatory requirements on determining food safety. The MLG shows methods for sample preparation, isolation and identification of foodborne pathogens (and associated toxins). FSIS does not endorse any of the products described in the MLG, but the Guidebook has been a valuable resource for choosing methods that effectively and reliably help maintain a safe food supply.

There are currently 10 Japanese Wagyu beef processors using the Hygiena BAX® System Q7 instruments, and the assays that are appropriate for beef imports, including the BAX® System PCR assays for *E. coli* O157:H7, Shiga toxin-emitting *E. coli* (STEC), and *Salmonella* species. These assays are also certified by the AOAC and AFNOR to produce results that are at least equivalent to the reference (cell culture) method. The assays can provide results as soon as 13 hours and are validated for use in a wide variety of matrices and surfaces.

**“There are currently 10 Japanese Wagyu beef processors using the Hygiena BAX® System Q7 instruments”**

**The companies listed as the Meat Process Establishment for exporting Wagyu beef to US across the 12 prefectures:**

- Iwachiku Co. in Iwate Prefecture
- Gunma-ken Shokuniku Oroshiuri Shijo Co in Gunma Prefecture
- Hida Meat Center in Gifu Prefecture
- Nanchiku Co. in Kagoshima Prefecture
- Sankyo Meat Ltd. In Kagoshima Prefecture
- Starzen Meat Processor Co. in Kagoshima
- JA Shokuniku Kagoshima Co. in Kagoshima
- Miyachiku Co. Takasaki Plant in Miyazaki Prefecture
- Miyachiku Co. Tsuno Plant in Miyazaki Prefecture
- Kumamoto Chikusan Rytsu Center Co. in Kumamoto Prefecture



This year they are continuing their efforts in other prefectures. To date Hygiena has sold 12 BAX systems to the Meat Inspection Center, part of the Japanese Ministry of Health, Labor and Welfare’s Central Competent Authority. This year they are targeting another 15 sites that handle meat processing. The volume of testing is not yet known, as the different sites are still in the initial stage of establishing and testing their protocol, preparing to be audited by USDA before they can start exporting to US. The Wagyu beef export to US would constitute 10% of their total Wagyu beef export. Currently, most Wagyu beef is mainly exported to Hong Kong and Taiwan.

