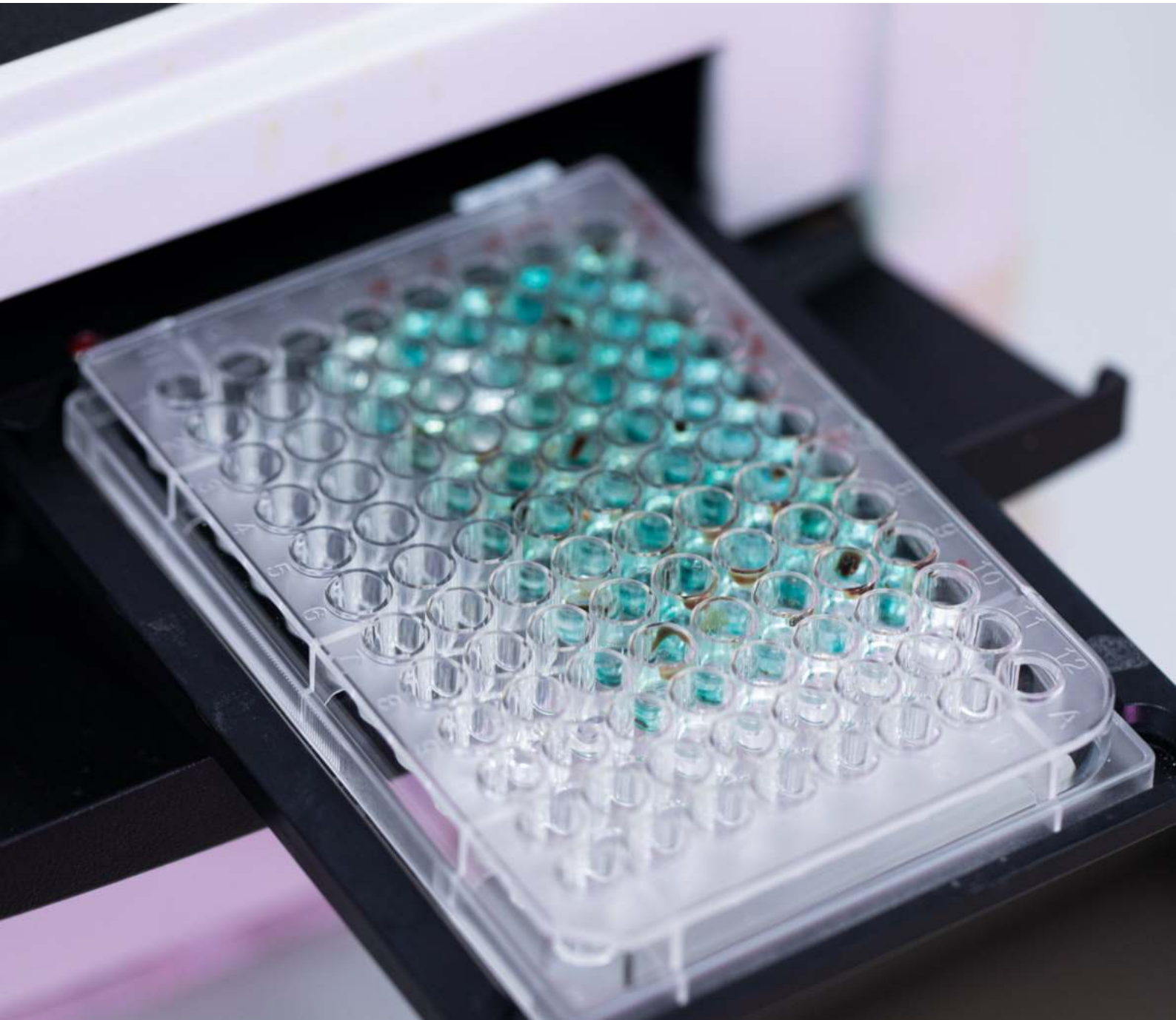


Iron Measurement Solution

R&D of IN VITRO DIAGNOSIS (IVD) Core Materials



About Jiangsu Watson

A glass beaker containing a liquid, set against a background of a periodic table of elements. The beaker is the central focus, with a white label on its side that reads "approx. vol. 100 ml" and "25". The background is a dark, blue-toned periodic table with various elements and their symbols visible, such as Vanadium (V), Molybdenum (Mo), Rhenium (Re), and Holmium (Ho).

Jiangsu Watson Bio Ltd is high-tech enterprise established in China by Watson International Limited, specializing in biomedicine, R&D, production and application of core materials of in vitro diagnosis and technical services. Watson has laboratories in Shanghai and Chengdu, China, and cooperates with Watson's laboratories globally to accelerate the industrialization of IVD raw materials.

Based on its technical platforms for enzyme mining & characterization, enzyme molecule optimization & modification, high-throughput screening of enzyme genes, organic synthesis, synthetic biology, and antigen-antibody R&D and production, Jiangsu Watson has developed hundreds of materials related to biomedicine, vaccine production and in vitro diagnosis.

With a pharmaceutical-grade special enzyme production system of ultra-large production scale and ultra-high equipment standard established, Jiangsu Watson has been providing products and services to over 100 domestic biomedicine, vaccine, and in vitro diagnosis reagent manufacturers; meanwhile, its products have been exported to over 25 overseas countries and regions.

The Company will continue to expand its product range, increase its product variety, and strive to develop Jiangsu Watson into a world-class supplier of special enzyme products and services.



Ferene

IN VITRO Quantitative Measurement of Iron in Serum

Ferene Disodium Salt

Application

Iron measurements are used as an aid to monitor and diagnose anemia, hemochromatosis, chronic inflammatory disorders, hepatitis and lead poisoning. The product based on Watson's Ferene uses a spectrophotometric method that is reliable, convenient, and is intended for the measurement of iron in serum.

Identification

Name: Ferene disodium salt

CAS Number: 79551-14-7

Chemical Name: 5,5'-[3-(2-Pyridyl)-1,2,4-triazine-5,6-diyl]difuran-2-sulfonic acid disodium salt

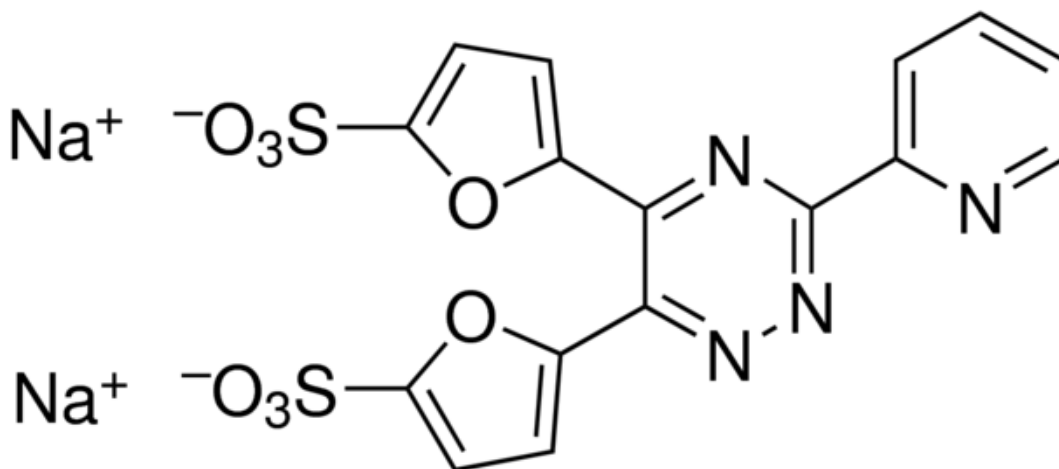
Molecular Formula: C₁₆H₈N₄Na₂O₈S₂

Molecular Weight: 494.37

Beilstein Registry Number: 5710932

MDL Number: MFCD00040642

Molecular Structure:



Quality Control

ITEMS	STANDARDS
Appearance	Yellow solid
Moisture	9.0-13.0 %
E _{max} 593nm Fe ²⁺ /Ferene (color limiting)	> 34000
E _{max} 593nm Fe ²⁺ /Ferene (iron limiting)	> 34000
E _{max} 304nm (in distilled water)	> 25500
Iron content	< 5 ppm

Transportation and storage: The product is easy to absorb moisture and needs to be stored in a dry place, tightly sealed and protected from light.

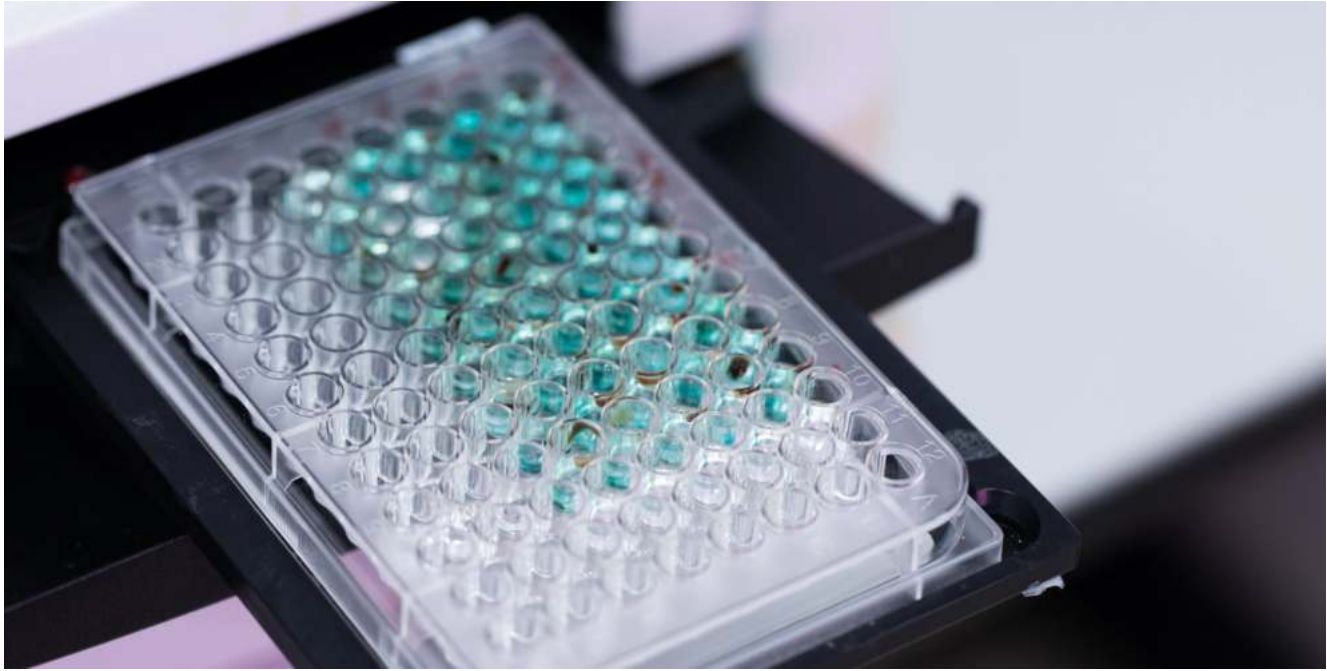
Shelf Life: 2 years

Competitive Advantages

- 1. World's top quality:** After multiple tests and comparisons, the world's top diagnostic reagent companies in the US, Germany, Switzerland, Japan finally chose Watson's raw materials to ensure the sensitivity and accuracy of iron detection reagents.
- 2. Strict quality control:** The synthesis process designed by Watson for this product almost completely eliminates the incorporation of iron ions, and uses ultraviolet absorption method to detect the iron content. Watson will additionally test the clarity of the solution before shipment to avoid excessive iron ions.
- 3. Stable supply capacity:** Watson's production route fully considers the requirements of environmental protection and compliance to make the production process sustainable. In order to meet the temporary demand, Watson will carry out global stocking for this materials.

Other IVD Materials

English Name	Product Overview
T7 RNA Polymerase	Efficient synthesis of mRNA; recombinant expression in E.coli; GMP standard.
Vaccinia Capping Enzyme	Adding the 7-methylguanosine cap (Cap0) to the 5' terminus of RNA to improve mRNA stability and translation efficiency and reduce the immunogenicity of mRNA; derived from recombinant expression of vaccinia virus in E.coli; GMP standard.
mRNA Cap-2'-O-Methyltransferase	Specifically transferring the methyl of methylation donator SAM to the Cap0 structure in RNA to form the Cap1 structure and improve mRNA translation efficiency; derived from recombinant expression of vaccinia virus in E.coli; GMP standard.
Poly(A)Polymerase	With ATP as the substrate, adding adenyl acid to the 3'-hydroxyl terminus of RNA to form the PolyA tail structure, which can enhance mRNA stability and translation efficiency, and can be used as the target for Oligo dT purification to purify RNA; recombinant expression of Poly (A) Polymerase in E.coli; GMP standard.
RNase inhibitor (Recombinant)	Inhibiting the activity of RNase A, RNase B and RNase C through specific binding; protecting RNA from degradation; recombinant expression of murine RNase inhibitor in E.coli; GMP standard.
DNase I	Shearing the endonuclease of single-stranded or double-stranded DNA, to efficiently remove DNA template; recombinant expression in E.coli; GMP standard.
RNase III	Acting on double-stranded RNA (dsRNA), the product is 18-25bp siRNAs with 5'-PO ₄ , 3'-OH, 3'-end projecting two nucleotides, suitable for RNAi in mammalian cells; recombinant expression in E. coli; GMP standard.
T4 RNA ligase	ATP-dependent ligase, catalyzing 5'-phosphoric acid and 3'-OH to form phosphodiester bond; capable of RNA cyclization and 3'labelling; recombinant expression in E.coli; GMP standard.
Pyrophosphatase Inorganic (yeast)	hydrolyze the inorganic pyrophosphate produced in the nucleic acid amplification experiment, to avoid its inhibitory effect on the reaction system, and increase the yield of reaction products including IVT and PCR; recombinant expression in E.coli; GMP standard.
Alkaline Phosphatase	Non-specific catalysis of 5'and 3' ends of DNA and RNA, to further reduce the immunogenicity of mRNA; recombinant expression in E.coli; GMP standard.



Company Name: Jiangsu Watson Bio Ltd

Address: Room 1514, Building 1, Yatai Plaza, Zhaofeng Road,

Huaqiao Town, Kunshan City, Jiangsu Province, China

Lab address: 1501 Jinsui Road, Pudong New District, Shanghai, China

Tel: +86-512-81867270

Fax: +86-512-81867270-3

Email: contact@watson.bio

General Website: <https://www.watson.bio>

English Website: <https://www.watson-bio.com>

中文网址: <https://www.watson-bio.cn>



www.watson.bio