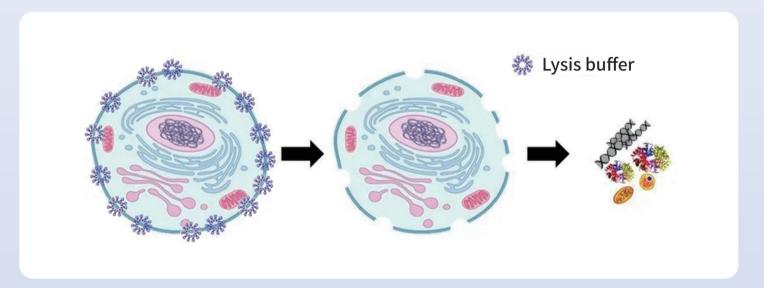




Lysis buffer lyses cells under nondenaturing conditions, consisting of surfactants and protease inhibitors. Traditional lysis buffers in the market are usually applied in western blot, including high concentration of Triton X-100 and NP-40. These surfactants will damage protein structure, affecting accuracy and sensitivity of ELISA assay.



FineTest[®] develops an optimized ELISA lysis buffer and decreases the concentration of Triton X-100 or NP-40. This lysis buffer lyses animals' cells under mild conditions and releases the target protein via keeping the natural structure of ptoteins to reduce damage. Allowing direct use in ELISA without additional processing can decrease the interference of antigen-antibody reaction and improve accuracy and reliability. The validated 0.1% SDS lysis buffer achieves the ideal balance between lysis and protection, and is the reasonable choice for ELSIA assay.

FineTest® Lysis Buffer Vs Common RIPA Lysis Buffer

Assay Procedure Summary:

Compare assay data between FineTest Lysis Buffer① with common ripa lysis buffers(②-⑥) in the market. E.g. Detection for cytoplasmic protein h.Casp3. Use Hela cell as the sample. Prepare different concentrations and surfactant components of common lysis buffers for cell lysis. Compare ELISA assay results of each sample group. Conduct the assay in triplicate. Components of lysis buffer and assay results are listed below.

Surfactant effect in the lysate (SDS/NP-40/TX-100)

Base buffer: 50mM Tris, 0.9% NaCl, 1mM PMSF PH7.2

Human.casp3 (hela lysate) BCA:1mg/ml No dilution Lysate blank **Experimental Products** Concentration **Assay Operation** (OD450) (OD450) FineTest® Lysis Buffer 2.411 0.088 (1) SDS 0.1% 2.146 **2** SDS 0.5% 0.093 (3) NP-40 1% 50mM Tris(pH 1.822 0.149 7.4), 150mM NaCl, Add 1mM Common RIPA Lysis Buffer (4) NP-40 5% 1.758 0.146 PMSF before use. (5) TX-100 0.1% 2.053 0.154 6 TX-100 1% 1.662 0.148 (7) 10mM PBS **Control Group** 2.046 0.195 ultrasonic control

Seen from assay results comparison above:

FineTest ®Lysis Buffer ① achieves the best assay result, showing the strongest target signal and the lowest background.

Higher concentration of common RIPA lysis buffers causes denaturation of some proteins, weaker signal and slightly high background.

