TruStrip Ordering information

TruStrip™ Sample Transfer Strips are available **without** or **with** the sample tracking dye (STD) in defined volumetric capacity (5, 15, 25, 50, 100, 200, and 400 µl). Strips with additional species tags (human, mouse, rat, rabbit, monkey, bovine, pig, goat) or no species tags can be ordered.

TruStrip Strips without Sample Tracking Dye		
Cat#	**Description**	
STS-05-50	TruStrip™ Sample Transfer Strip, 5 µl, 50/Pk	
STS-15-50	TruStrip™ Sample Transfer Strip, 15 µl, 50/Pk	
STS-25-50	TruStrip™ Sample Transfer Strip, 25 µl, 50/Pk	
STS-50-50	TruStrip™ Sample Transfer Strip, 50 µl, 50/Pk	
STS-100-50	TruStrip™ Sample Transfer Strip, 100 µl, 50/Pk	
STS-200-50	TruStrip™ Sample Transfer Strip, 200 µl, 50/Pk	
STS-400-50	TruStrip™ Sample Transfer Strip, 400 µl, 50/Pk	
Note: Please mention the desired species tag when ordering.		

TruStrip Strips with Sample Tracking Dye (STD)		
Cat#	**Description**	
STSD-05-50	TruStrip™ Sample Transfer Strip with STD, 5 µl, 50/Pk	
STSD-15-50	TruStrip™ Sample Transfer Strip with STD, 15 µl, 50/Pk	
STSD-25-50	TruStrip™ Sample Transfer Strip with STD, 25 µl, 50/Pk	
STSD-50-50	TruStrip™ Sample Transfer Strip with STD, 50 µl, 50/Pk	
STSD-100-50	TruStrip™ Sample Transfer Strip with STD, 100 µl, 50/Pk	
STSD-200-50	TruStrip™ Sample Transfer Strip with STD, 200 µl, 50/Pk	
STSD-400-50	TruStrip™ Sample Transfer Strip with STD, 400 µl, 50/Pk	
Note: Please mention the desired species tag when ordering.		

TruStrip™ Sample Storage Trays- Ordering Information

Cat#	Description	Description
STT5-50	TruStrip™ Sample Storage/Transportation Trays for 5-50 µl Size Strips, 10 Trays (5 individual detachable chambers per tray, each chamber has "snap-close" lid; 10 trays for 50 strips)	
STT10-50	TruStrip™ Sample Storage/Transportation Trays for 100-400 µl Size Strips, 10 Trays (5 individual detachable chambers per tray, each chamber has "snap-close" lid; 10 trays for 50 strips)	

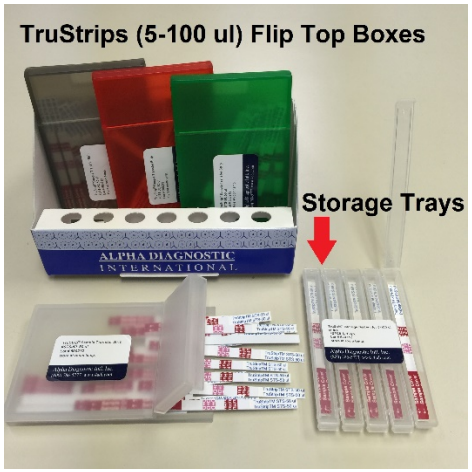
Instruction Manual No. M-STS-05-800

TruStrip™ Sample Transfer System (STS) for 5-400 µl Strips

Cat. # STS-05-50, #STS-15-50, #STS-25-50, #STS-50-50, #STS-100-50, #STS-200-50, #STS-400-50 **(without sample tracking dye)**

Cat. # STSD-05-50, #STSD-15-50, #STSD-25-50, #STSD-50-50, #STSD-100-50 #STSD-200-50, #STSD-400-50 **(with sample tracking dye)**

A smart, efficient, tamper-proof and inexpensive means of collecting, archiving, transporting, and testing of biological samples



For In Vitro Research Use Only (RUO)

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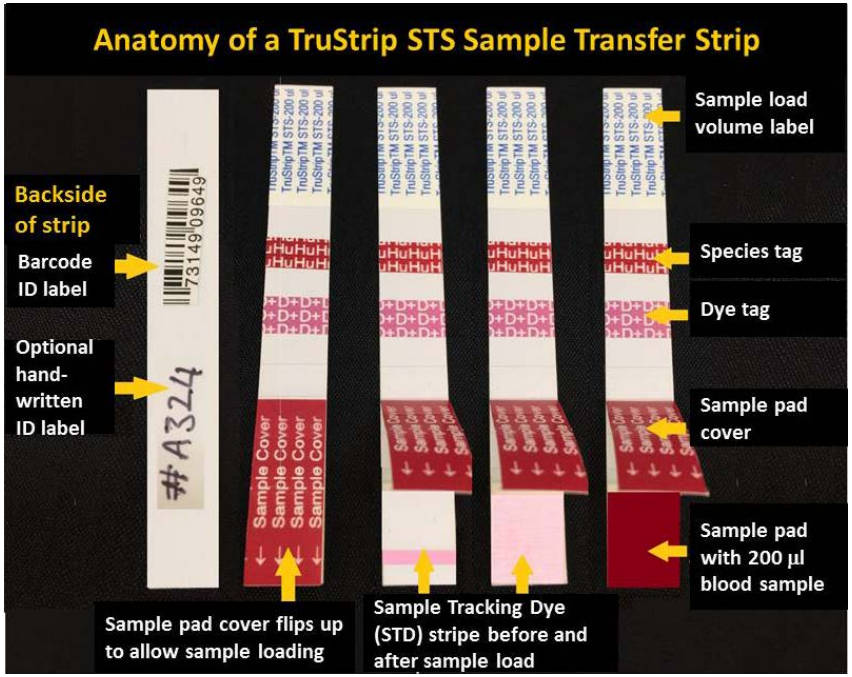
LIFE TECH Life Technologies™
Your Molecular & Cell Technology Partner

TruStrip™ Sample Transfer System (STS)

Intended Use

TruStrip™ strips and the **storage/transport trays** constitute the **TruStrip™ Sample Transfer System (STS)**. TruStrip strips are an efficient, tamper-proof, and inexpensive means of collecting defined volumes (5, 10, 15, 25, 50, 100, 200 and 400 µl) of biological samples (blood, serum, plasma, urine, proteins, antibodies, DNA, bioanalytical reagents, and chemicals) on pre-calibrated volumetric strips - without the need for any measuring devices such as a pipette. Individual strips containing samples are air dried and stored in a specially designed storage and transport tray for long term preservation at room temperature. The samples that are collected on these strips can be used for archiving, transporting, and testing, as necessary.

General Information



The TruStrip storage tray design allows storage of thousands of individual samples in small space. Strips containing samples are kept in individual chambers that can be opened and closed without touching other samples. Clinical human or animal samples, such as dried blood spots (DBS) are considered non-hazardous by the US Dept. of Transportation (DOT). The Centers for Disease Control and Prevention (CDC) also considers DBS as a non-hazardous, non-regulated, and exempt material.

Performance validation data

Sample Capacity and Recovery	
Sample load capacity of saline, blood, plasma, serum, urine, purified IgG, Albumin, DNA or plasmid DNA (5 µl-400 µl)	96-105%
Recovery of total blood or plasma proteins	97-103%
Recovery of purified proteins or antibodies	96-104%
Recovery of purified dsDNA or plasmid DNA	96-105%
Recovery of tracking dye	95-103%
Preservation of Biological Activity	
Functionality of antibodies to Ebola and FMD in whole blood or serum transferred, dried on STS strips, stored and recovery testing by ELISA; Functionality of purified antibodies (human or animal antibodies)	95-108%
Preservations of enzyme activity (purified enzymes such HRP or Alkaline Phosphatase)	96-100%
Functionality of DNA or plasmid DNA (Transfection)	Yes
Sample Stability	
Samples (proteins, whole blood, serum, plasma), purified proteins & IgG stable at 4^{o}C, -20^{o}C, room temp (90 days) and 40^{o}C (30 days)	Yes

Additional TruStrip™ STS Information

TruStrip STS frequently asked questions (FAQ)

http://www.4adi.com/objects/catalog/product/extras/TruStrip-STS-Sample-Transfer-System-FAQ.pdf

Watch TruStrip™ Video

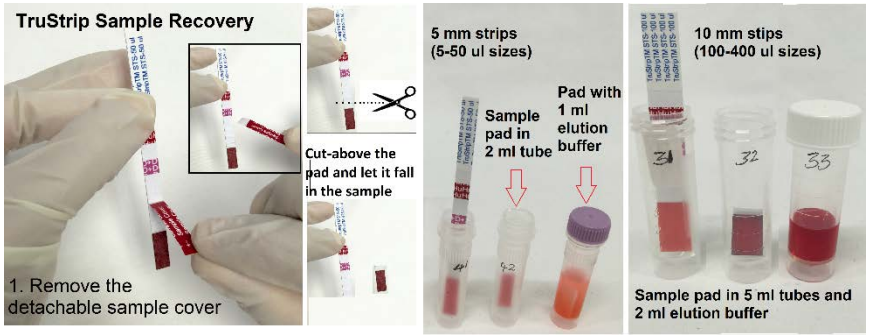
https://www.youtube.com/watch?v=feliCXZhUqs

TruStrip™ Sample Transfer Strips – Elution or Recovery

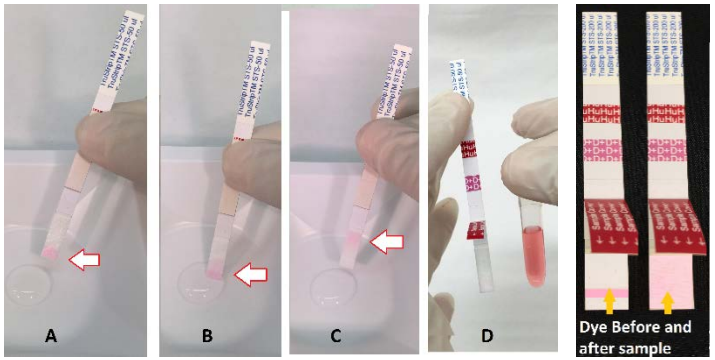
Quantitative recovery of sample

This method is appropriate for maximum sample recovery.

1. Label the sample recovery tubes with appropriate ID or barcodes.
2. Use 2 ml tubes for 5-50 µl strips and 5 ml tubes for 100-400 µl strips.
3. Add a minimum of 1 ml (for 5-50 µl size strips) and 2-4 ml (for 100-400 µl size strips).
4. Remove the red sample pad cover tape by pulling it off the strips.
5. Cut off the sample pad 2-3 mm above the pad but without touching the pad. Allow it to fall into the tube.
6. Cap the tubes, mix, and place on an orbital or end-to-end shaker for 30 min at room temp. In the absence of a shaker, the tubes can be lightly mixed manually or vortex for maximum sample recovery.
7. Sample recovery will be evident in the recovery solution if colored samples (blood or serum etc.) or when strips with STD are used.



TruStrip Sample Tracking Dye (STD) - Sample "on and off" indicator



TruStrip strips with the STD have a dye tag and the dye is clearly visible in unused strips. Upon sample application, the dye will diffuse (A-C) and also elute with the sample (D). STD line is more prominent on 100-400 µl size strips (right panel). Therefore, STD serves as "**sample-on and sample off**" indicator even when a colorless sample is transferred to the strips.

The STD is chemically inert and does not interfere with most proteins, antibodies, enzymes, and DNA analyses. The STD has a unique absorption spectrum and may also serve to "quantify" the recovery efficiency of colorless samples. ADI has a range of STDs that can be customized for a user or sample type and whose color and spectral properties are only known to the user. This feature adds to sample security and integrity.

The samples collected on TruStrip strips can be easily shipped at room temperature without the use of refrigeration or dry ice, which prevents expensive shipping costs. The samples can be shipped as a single tray or in clusters of 5-10 samples. The dried samples from TruStrip strips can be quantitatively recovered by simple immersion and gentle shaking in water, saline, buffer or solvent. TruStrip strips have been designed for sample recovery and processing individually or in high-throughput 96-tray formats.

The active sample pad of TruStrip strips also contains a proprietary 'Visual Trackable Dye' that tracks sample load (sample-on) and elution (sample-off) even if the sample has no color. The unique sample pad and strip design have added features, such as a non-porous inert support, prevention of sample contamination, separation of sample strip during storage and transport, color-coded sample or species identification labels, and TruStrip strip size labels. The backside of TruStrip strips can be used for writing sample ID or applying barcode labels for easy identification. TruStrip strips eliminate the challenges in contaminant-free sampling, preserving, transporting, processing, and quantitative recovery of samples (proteins, enzyme, antigens, antibodies, and DNA). Environmental, toxicological, forensic, food, drug, and plant samples can also be transferred, archived, transported and tested.

TruStrip™ is a trademark of Alpha Diagnostic Intl for all strip-based products (patent pending).

Key Benefits of TruStrip™ Sample Transfer System and Uses:

- Ability to collect known volume of sample (5 µl-800 µl) without the need for any measurement devices
- Collect a variety of liquid samples (biological samples, DNA or plasmids, drugs and chemicals) in laboratories or field applications
- Use of sample tracking dyes assures tamper-proof sampling and recovery
- Visual identification of sample size, species, and identity (manual or barcodes)
- Sample archiving, storage and transport at ambient temperature and without contamination
- Efficient storage of thousands of samples in 1sq ft. space; high-throughput sample processing
- Ideally suited to sample and test biological samples for protein, antibodies, and DNA

Storage and Shelf life

TruStrip™ sample transfer strips and the storage trays are shipped and stored at room temp in a dry place. Shelf life is 2-3 yrs. for the strips and lifetime for the plastic trays.

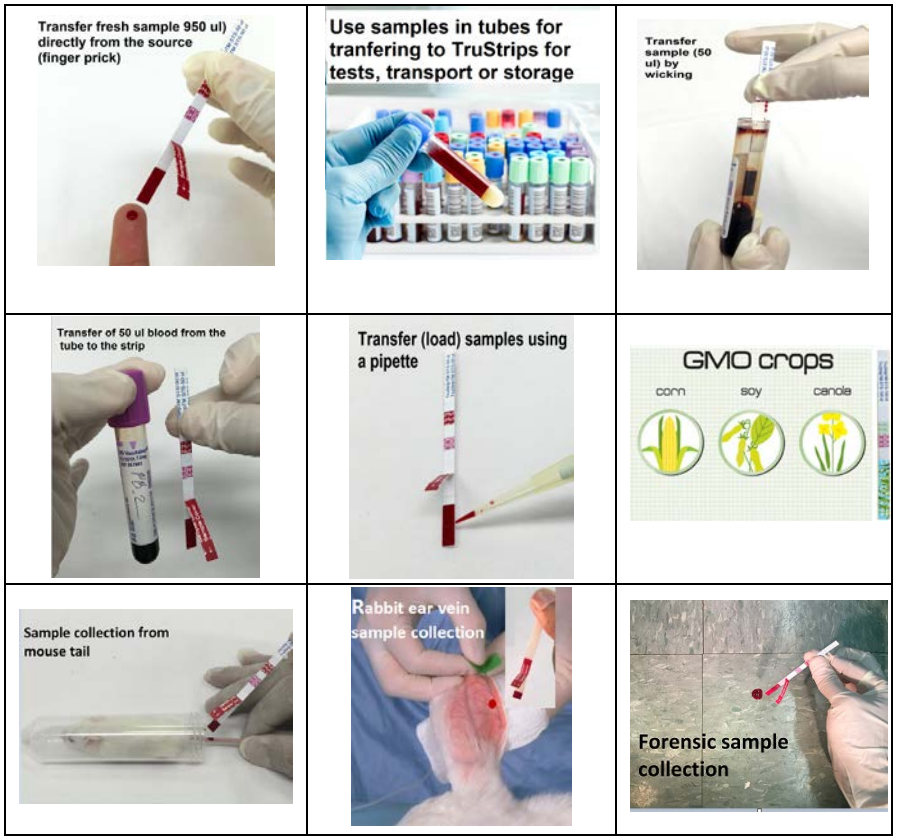
Non-hazardous. No MSDS is required.

Sample Types

- **Biological fluids (blood, plasma, serum, urine, cell culture medium, saliva, sputum)**
- **Purified proteins (antibodies, proteins, carbohydrate, enzyme)**
- **Antibodies (whole serum, purified, recombinant antibodies)**
- **DNA (whole blood, purified DNA, plasmid DNA, oligonucleotides).**
- **Forensic and toxicological samples**
- **Plants extract (seeds, leaves, etc.)**

Any sample that is collected and stored on regular tubes and vials can be safely and quantitative transferred on TruStrip transfer strips and dried at room temp for archiving, testing or transport.

TruStrip™ Sample Transfer Strips - Sample Transfer



Use appropriate size strip (5, 15, 25, 50, 50, 100, 200, 400 µl) with or without the sample tracking dye. Strips may have a species tag (mouse, rat, human, monkey, bovine, pig, cat, and dog etc.). Each strip has an active sample pad below the 'red sample pad cover' that can be lifted to apply samples. There are 2 ways to transfer samples.

1. Apply appropriate sample ID at the back of the strip or use barcode labels.
2. **Load known volume of sample onto the 'sample pad'** using a pipette or transfer pipette. Do not exceed the designated capacity of the strip. Transfer the strips to the storage trays or let the sample sit for a few minutes before transferring to the TruStrip Storage Tray. If sample is applied too quickly at one spot, there may be a small liquid bubble, but it will adsorb within few minutes.
3. The best use of TruStrip strips is the ability to transfer defined volume of sample (5-400 µl) without a pipette. Lift the hinged cover pad and **touch the sample pad at the top of sample to allow wicking** (5-15 seconds). Strips will only absorb the designated volume. DO NOT DIP OR IMMERSE THE SAMPLE PAD INTO ANY SAMPLE. Transfer the strip to the storage trays.
4. Sample will dry at room temp. in 30-60 mins. Drying process can be enhanced by putting the sample storage trays at 25-25°C in an incubator with air circulation.
5. Dried samples strips can be processed immediately for sample recovery and testing, stored at room temp or 4°C as required, or transported in a padded envelop.

TruStrip™ Sample Transfer Strips – Elution or Recovery

Samples from TruStrip strips can be recovered in water, saline, buffer or a solution that is compatible with the sample analyses. TruStrip strips are supplied in either **0.5 cm width (5, 15, 25, and 50 µl sizes)** or **1 cm width (100, 200, and 400 µl sizes).** The 0.5 cm width is designed to fit any 1-2 ml vials, 2-ml tubes, tubes for 96-wells format or even 96-well plate.

5-50 µl size strips	Use 1 ml or more solution for recovery (use 2 ml tubes)
100-400 µl size strips	Use 2 ml or more solution for recovery (use 5 ml tubes)

The following procedure is recommended for semi-quantitative recovery or full recovery of samples.

Semi-quantitative recovery of sample

This method is appropriate for samples that only require a simple confirmation of the presence of absence of the test substance. An example is detection of proteins, enzyme, antigens, antibodies, DNA etc. where actual % recovery is not important.

1. Label the sample recovery tubes with appropriate ID or barcodes.
2. Add 1 ml recovery solution to the tubes.
3. Remove the red sample pad cover tape by pulling it off the strip.
4. Immerse the sample pad portion of strip in the recovery solution. Sample pad should be completely immersed in the solution. Manually shake the strips a few times for 5-10 sec and leave for 30 min or longer at room temperature. Occasional manual agitation will help.
5. Sample recovery of colored samples (blood, serum, plasma, and urine etc.) can be easily visible. For colorless samples, the use of strips with sample tracking dye (STD) will also provide a visual indicator.
6. Remove the strips from the recovery tubes (save the strips until analyses is complete).
7. Cap the tubes, store at temperature appropriate for a given sample or proceed with the sample analyses.
8. Notes: It is possible to use 250-500 µl of recovery solution but the sample recovery may be less.

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