U-Blot® Pan-Itaconyl-Cysteine Rabbit pAb (WT9030)

User Manual

General Information

Product name	U-Blot® Pan-Itaconyl-Cysteine Rabbit pAb
Product No.	WT9030
Clonality	Polyclonal
Alternative name	C_{Ita}

Key Features

Target	Itaconyl-Cysteine
Reactivity	Species Independent
Applications	WB, IHC-P, ICC/IF, FC
MW(Calculated)	Multiple
MW(Observed)	Multiple
Host Species	Rabbit
Isotype	IgG
Conjugate	Unconjugated
Modification	Cysteine itaconylation
Modification Site	Cys（C）
Purification	Protein A
Immunogen	Polypeptide

Storage Information

Storage	Store at -20°C. Avoid repeated freeze-thaw cycles
Stability	Stable for 12 months from date of receipt / reconstitution
Formulation	0.01% NaN3, PBS, 60% Glycerol, BSA

Product Usage Information

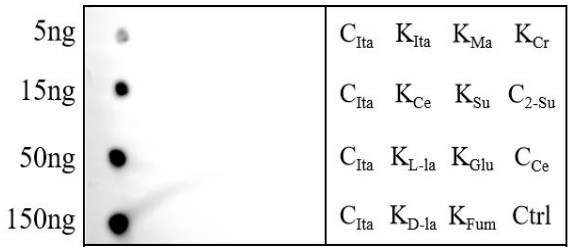
Applications	Dilution	Recommended Species
WB	1:1000	All
IHC-P	1:100-1:200	Human, Mouse
ICC/IF	1:100-1:200	Human
FC	1:100-1:200	Human

Target Information

Background	Itaconyl-Cysteine (C(itacon)) is a novel metabolism-dependent post-translational modification occurring on cysteine residues of proteins. This modification is mediated by itaconate, a metabolite abundantly produced under immune activation and inflammatory conditions, via covalent reaction with the thiol group of cysteine. Itaconylation is widely involved in key biological processes including inflammatory signaling, oxidative stress response, innate immunity, and metabolic reprogramming. It plays critical regulatory roles in the development of inflammatory diseases, infectious immunity, and metabolism-related disorders, serving as an important molecular marker and research target linking immunometabolism and protein function regulation.
Cellular Localization	/

Images

Dot Blot



Note: The C_{Ita} peptide was diluted in gradients of 5 ng, 15 ng, 50 ng, and 150 ng. All other peptides were used at a dilution amount of 150 ng.

Blocking buffer: 5% NFDM/TBST

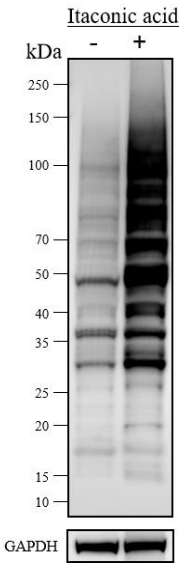
Primary antibody dilution: 1:2000

Primary antibody incubation condition: 2 hour at room temperature

Secondary antibody: Goat Anti-Rabbit IgG H&L (HRP)

Exposure time: 60 seconds

WB



Samples:(-): HeLa, (+): HeLa +Itaconic acid (10 mM, 24 hr)

Protein loading amount: 30 µg

Gel concentration: 8-16%

Blocking buffer: 5% NFDM/TBST

Primary antibody dilution: 1:1000

Primary antibody incubation: 2 hour at room temperature

Secondary antibody: Goat Anti-Rabbit IgG H&L (HRP)

Exposure time: 29 seconds

Predicted band size: Multiple

Observed band size: Multiple