## BACKGROUND

Carbonyl reductase 1 and Carbonyl reductase 3 belong to the family of short-chain dehydrogenase/reductase proteins that play a role in metabolism throughout the body. Both proteins are monomeric Carbonyl reductases that function to catalyze the NADPH-dependent reduction of various carbonyls (generally products of lipid peroxidation) to their corresponding alcohols. Carbonyl reductase 1 and Carbonyl reductase 3 share high sequence similarity at the amino acid level and are responsible for the metabolism of not only endogenous compounds, but of various pharmacological products as well. Genetic polymorphisms in both proteins result in individual variability at the level of drug metabolism. Defects in the genes encoding Carbonyl reductase proteins have implications in cancer, diabetes and errors in metabolism.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: CBR3 (human) mapping to 21q22.12.

## PRODUCT

Carbonyl reductase 3 (h): 293T Lysate represents a lysate of human Carbonyl reductase 3 transfected 293T cells and is provided as $100 \mu \mathrm{~g}$ protein in $200 \mu \mathrm{~L}$ SDS-PAGE buffer.

## APPLICATIONS

Carbonyl reductase 3 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Carbonyl reductase 3 antibodies. Recommended use: 10-20 $\mu$ l per lane.
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

## STORAGE

Store at $-20^{\circ} \mathrm{C}$. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

