TRPV3 Antibody

For Research Use Only. Not For Use In Diagnostic Procedures.

### Background
The transient receptor potential cation channel subfamily V member 3 (TRPV3 or VRL3) is a widely expressed ligand-gated ion channel protein that acts in temperature detection between 22º C and 40º C (1). Related transient receptor proteins (TRP) respond to different temperature ranges; TRPA1 responds to cold temperatures and TRPM1 to cool, while warmer temperatures elicit response from TRPV3 and TRPV4. Noxious heat or painful temperatures correlate with TRPV3 and TRPV1 activity (reviewed in 2). TRPV3 is found in association with TRPV1 (VR1) and is thought to modulate activity of this noxious heat-responsive protein (3). Increased TRPV1 and TRPV3 protein expression is correlated with nervous injury, while reduced expression of both may be see in cases of diabetic skin neuropathy (2). Recent evidence implicates TRPV3 in pruritic dermatitis, or itching associated with eczema and related skin disorders (4).

### Specificity/Sensitivity
TRPV3 Antibody detects endogenous levels of total TRPV3 protein.

### Source/Purification
Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Asn101 of human TRPV3. Antibodies are purified by peptide affinity chromatography.

### Background References

### Applications and Species Cross-Reactivity

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<th>Applications</th>
<th>Species Cross-Reactivity</th>
<th>Molecular Wt.</th>
<th>Source</th>
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<td>W, IP</td>
<td>H, M</td>
<td>98 kDa</td>
<td>Rabbit** **</td>
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*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

### Recommended Antibody Dilutions:
- Western blotting: 1:1000
- Immunoprecipitation: 1:50

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

### Storage
Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C.

Do not aliquot the antibody.

### Entrez-Gene ID
#162514

### Swiss-Prot Acc.
#Q8NET8

Western blot analysis of extracts from SH-SY5Y cells and mouse brain using TRPV3 Antibody.

**IMPORTANT:** For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.